THE BUILDER
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THE SITE OF THE ADELPHI. (See Notes Pages.)

MEETINGS

FRIDAY, *October* 2.

Incorporated Institute of British Decorators. Mr. J. M. Holmes, F.R.S.A., on "Decoration and Psychology." At 66, Portland-place, W.1. 8 p.m.

FRIDAY-SUNDAY, *October* 2-4.

Town Planning Institute. Annual Country Meeting. At Norwich. FRIDAY: Meeting in Stuart Hall (Suckling House); Welcome by the Lord Mayor of Norwich; Mr. G. L. Pepler on "Planning for Town and Country," 3 p.m.; Institute Dinner at the Royal Hotel, 7.30 p.m. SATURDAY: Meeting in Stuart Hall; Mr. Stanley J. Wearing on "Old Norwich Buildings," 10.30 a.m.; assemble at Ethelbert Gate (Cathedral Close) for walk round the city under expert guidance, 2.30 p.m. SUNDAY: Motor-coach Tour of the Norfolk Broads, including inspection of some of the flint churches, visiting Aylsham, North Walsham, Coltishall, Wroxham, Ranworth, Horning, Potter Heigham, Caister, Yarmouth, and returning via Acle. 10 a.m.

SATURDAY-TUESDAY, *October* 3-6.

British Commercial Gas Association. Annual Conference. At Bath.

WEDNESDAY, *October* 7.

Institution of Structural Engineers (Lancashire and Cheshire Branch). Chairman's Address by Mr. G. P. Bridges. At the Constitutional Club, Manchester. 8.30 p.m.

Southern Counties Federation of Building Trades Employers. Autumn General Meeting. At Goldings Hotel, Haywards Heath. 2 p.m.

St. Paul's Ecclesiological Society. Mr. A. E. Henderson on "Fountains Abbey—Past and Present." At 6, Queen-square, W.C.1. 8 p.m.

THURSDAY-SUNDAY, *October* 8-11.

Council for the Preservation of Rural England. Ninth National Conference for the Preservation of the Countryside. At Torquay.

WEDNESDAY, *October* 14.

Institution of Sanitary Engineers. Mr. M. W. Lashmar on "Recent Workings of Sludge Digestion Plant at Sittingbourne." At Caxton Hall, S.W.1. 6 p.m.

WEDNESDAY-SATURDAY, *October* 14-17.

National Smoke Abatement Society. Eighth Annual Conference and Smoke Abatement Exhibition. In London.

THE SITE OF THE ADELPHI

(See page 628.)

ELEMENTARY SCHOOL BUILDINGS

A GOOD many years ago regulations were issued giving the accommodation required for school buildings under the Board of Education, and those conditions became the schedule to which all architects worked, whether engaged in school building or upon competition work in the same field. The result was that the school of those times developed an almost inevitable form and arrangement, and very little fresh thought appeared among the schemes prepared under this régime.

Eventually these regulations were cancelled and no longer issued from the Stationery Office, and the planner of school buildings was thus tacitly invited to contribute of his own thought and skill to the problem. We have had a considerable time to gain experience of this way of working, and, while it is quite evident that the architectural standard has risen, there is no clear indication that this is more than the result of a general raising in the standard of average architectural training, especially in the provinces. In fact, it would not be unfair to say that we have had no brilliant contribution to school planning during this period, though many admirable examples of architectural taste.

H.M. Stationery Office recently issued, under the ægis of the Board of Education, a booklet in connection with the planning of Elementary School Buildings,* in which the subject is explored from various angles. The implication would appear to be that designers do need some indication of the needs of this class of building from the educationists' end, and also in the light of other people's experience. This publication is evidently designed to fulfil this need.

There is no doubt that mere competence on the part of an architect does not ensure that his planning of a specialist building is the best that can be obtainable, though he will naturally gather together as much information as possible from those who are to run the premises, or who have experience of running similar premises elsewhere. The planning of a school on the best lines can only be satisfied by a pooling of ideas among both educationist and constructionist, so that each may react upon the other. The schoolmaster must make his educational plans in conformity with the conditions with which he is familiar, and can frequently visualise no other conditions. He must, therefore, be prepared to enter into the spirit of free planning, so that he may grasp the opportunities which an unprejudiced eye may see in the fresh problem of a new school. On the other hand, the architect cannot be expected to grasp all the problems and difficulties of modern school life, though he can well deal with such matters if they are translated into constructional and planning influences. Obviously, the body most favourably placed to collect information from past experience and future needs is the Board of Education, and in its present publication it has approached the problem thoughtfully and in a somewhat fresh manner.

The previous regulations were very "cut-and-dried" in form, and savoured not a little of dictation. In such a form they were, perhaps, not altogether unwelcome to architects, since they did state clearly and definitely the standard of plan and construction that would be required to satisfy the needs of the times in the opinion of the Board. On the other hand, they forced upon the designer an almost fixed system of fenestration, for instance, by which the character of the design was bound to be dominated, and were equally uncompromising about a number of other essential features.

The present publication is less dogmatic in its direct application to the building, and deals with a more scientific test of building standards. It would appear that, from that more detached angle, the designer will be able to arrive at the ideal plan more readily than from a set of regulations on the old lines, which almost determined the plan for him. If it has been possible by these means to offer the facts of educational experience to the architect, and yet leave him free to add his own skill as a free planner to the problem, the work will prove to be both useful and extremely valuable both to the architect and to the community at large. It is not, however, quite clear that the new form in which these matters are treated makes a very marked advance on the old system, other than by incorporating such changes in idea as have naturally developed after a number of years' fresh experience. Actually the matter, though put in a suggestive form, probably indicates just as certainly the standards that will be required to obtain official approval of new schemes, as did the old and more tabulated instructions. In the matter of windows, for instance, the necessary degree of artificial lighting is given as a daylight factor, which is a scientific and logical way of dealing with a matter which must vary with different sites and conditions. In the old regulations, this matter was dealt with in the rough-and-ready way of putting a minimum proportion between floor and window areas, which is obviously unscientific. Yet this rough method, if based on practical experience, can apply very usefully to a great majority of average cases; and, though the subject can very rightly be explored afresh scientifically, it would have appeared useful to translate the results of experiment into a few arbitrary rules, which would have fitted the open-sited conditions which prevail almost in every case of a new school. Generally speaking, therefore, we should have welcomed more tabulated data in connection with this important subject, extending the excellent schedules of accommodation given in the appendices.

Accepting the new form of presenting these particulars, therefore, the information given is of especial interest in dealing with the new influences upon school organisation and planning, which have come about as a result of the raising of the school-leaving age. The type of school now required under the new conditions must differ materially from that of the elementary school which has been in use hitherto, and the general re-grouping which must follow this reorganisation must introduce new planning problems. We advise our architect readers to study this matter carefully, so that they may justify the tendency to employ private architects for the design of new school buildings. Any failure to grasp the new conditions would be a direct influence towards a return to, and extension of, official architecture in relation to school buildings at least, and possibly in other directions as well.

The inclusion of advertisements in the booklet is a questionable matter. It would appear to be a means of relieving the taxpayer of part of the cost of publication, but the commercial advantage may be more apparent than real.

* Elementary School Buildings, H.M. Stationery Office. Price 2s.

NOTES

The Adelphi.

WITH great rapidity the main block of the Adelphi buildings has been demolished and its site laid bare. As shown in the photographs which we reproduce on pages 625 and 626, there is now exposed an approximation to a longitudinal section through the famous "arches," and we realise visually something of the intricacy of the system of vaulting which the Brothers Adam erected on the muddy Thames foreshore to sustain their dignified terrace and streets of houses. Pathetic in its present desolation, the site somewhat resembles some excavated ruin in the Roman Forum. It may be recalled that it was in 1768 that the Brothers acquired a lease of 99 years from the Duke of St. Albans and erected the Adelphi buildings as a private speculation. The Terrace was an adaptation of the Palace of Diocletian at Spalato, with which Robert Adam had been greatly impressed during his Continental tour. The enterprise was not a commercial success, and in 1773 the Brothers were glad to obtain a Parliamentary Bill to enable them to dispose of the property by a lottery, representing a sum of £218,500. For some years the arches were open, and access was obtained through them to the wharves which then lined the Thames. In 1872/4 it was found necessary to underpin and strengthen the arches, which were at the same time partitioned off and converted into cellars. The new building to be erected on the site is from the designs of Messrs. Collcutt and Hamp.

Air Raid Precautions.

IT is almost incredible that a few years after the greatest war in history the world should be fearing and preparing for the possibility of another war of an even more disastrous character. So far as this country is concerned, no one in his senses wants war; but with the unrest and piling up of armaments abroad it is rightly thought that we should be prepared to defend and protect ourselves in case of attack. The experts seem to be agreed that air bombardment is the most serious menace that this country would have to face in the event of our being embroiled in another war; and, in addition to the provision of all possible defensive weapons, the Government has now recommended that measures should be taken for the passive protection of the civil population against injury by bombs and gas. We publish in this issue an article by Colonel W. Garforth, D.S.O., M.C., R.E. (Retd.), of the Air Raids Precautions Department of the Home Office, in which the kinds of missiles likely to be used by an enemy are described and the precautions to be taken against them set forth. These latter, of course, include the protection of buildings, and we would call the special attention of architects, builders and building owners to the suggestions made. Wherever protective measures involving building work are required, it is obviously desirable that they should be put in hand at once; "Preparing is preventing," and it will be the devout wish and hope of all that they may never be needed.

Art and the Machine

THE address which Mr. Eric Gill delivered to the Croydon School of Art and Crafts on the 23rd ult., a report of which we give on p. 650, was an unusually thoughtful and interesting contribution to the general discussion on the place of art in a machine age. We may not agree with all his conclusions, but the general direction of his remarks should provide matter for thought. "The diabolical direction in which industrialism is going," he said, "and on which it actually prides itself is the supersession of human labour by the machine. If this ideal were realised, human labour would be only for hobbies, while the necessaries of life would be made by machines. But the things men need are the things they love. During countless centuries men and women have expended all their care and skill on such things as the farm and the kitchen, on clothes, furniture, pottery, metal and the whole business of building, from cottages to cathedrals. It is said that if all such work were done by machinery we should be released for higher things, but for the majority of men and women there are no higher things."

Gas Charges.

THE present controversy in connection with the scales of charges of the South Metropolitan Gas Company may draw attention to the whole question of the charges for this necessity of modern life in varying conditions throughout the country. With this particular dispute we are in no way concerned, and upon it we desire to make no comment except in so far as it bears upon the question of gas charges in general. The broad principle that where the consumption is large, as must be the case where gas is used for heating purposes, the price should be reduced, is one which should be universally applied, as otherwise heating by gas is an uneconomic proposition. In this particular case the allegation is that the very small consumer on the old scale was obtaining gas at the expense of the larger consumers, and that may be a matter for adjustment if hardship on the poorer population is the result of the new scale. But in most cases the position is very different (especially where the undertakers are the local authority), and where although the undertakers take measures to induce people to use gas for heating by adver-

CHURCH OF ST. AGNES, FRESHWATER BAY, ISLE OF WIGHT.

[Another example of a thatched church, of interest in view of the recent discussion on thatch.]

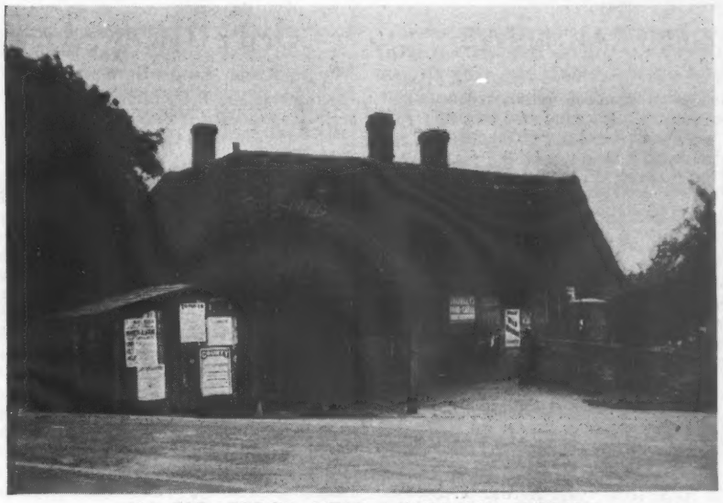
tising every kind of modern gas stove, a uniform scale is applied throughout, however large the consumption may be, except in the case where the consumption exceeds some 250,000 ft., a form of relief which never touches the private consumer.

Parliamentary Control and the Gas Industry

THE latitude permitted by Parliament in the case of many of the private Bills dates from before the days when heating by gas was at all a common practice, and the attention of Parliament is required to the whole question. In some cases the extreme limit in price is as high as 16d. per therm, and we could instance a case where the charge is uniform for both lighting and heating at the rate of 14d. per therm. A correspondent writing to us on the subject says: "Where the undertakers are the local authority the consumers require further Parliamentary protection, for in such cases charges are sometimes made to include matters which should be borne by the ratepayers at large. I can instance one case where the town is lighted at an uneconomic charge, the balance being imposed upon the private consumers in the charge for gas, and another in which certain works to secure the foreshore were contributed to out of the funds derived from the sale of gas, although the local authority were supplying gas to consumers who were outside the district of the urban council, but in a rural district unconnected with the work to the foreshore in the district of the urban council. In general I am opposed to Parliamentary interference with private enterprise, but where an element necessary to life under modern conditions is involved, an inquiry into the methods adopted may be necessary, especially in the case of local authorities who are gas undertakers."

The First Public Schools Art Exhibition.

THE exhibition at the Imperial Institute in aid of the Dockland Settlement, which consists of drawings produced under the art masters and mistresses of the boys' and girls' Public Schools, does credit on the whole to the instruction given, and is testimony to the aptitude of the young to express themselves in form and colour. The exhibits show very clearly the considerable variations of approach in the instruction given. Nor can one fail to perceive that the training in the girls' Public Schools is in some instances more influenced by the vagaries of theoretic outlook leading to "spookism," than is the work in the boys' schools, which seems less impressed by them. Schools such as Dulwich, Charterhouse, Tonbridge or Rugby show in their examples less of this impress and more close observation of nature and careful craftsmanship. In some cases the students appear to be more left to themselves than others, where the impress of the teacher tends to standardise the examples, and this gives a spontaneity which is lacking where the impress is too much felt. Though it is natural and right that the master should exercise an influence, it should not be a paralysing one. No. 52, "St. George's School," shows a frame full of woodcuts by different girls, but though cleverly executed they are so alike that they might all be the work of one hand. We take a few examples as worthy of special notice, amongst others which are of almost equal interest. "Dance Band," by — Smith (which arrived too late for cataloguing) is a well observed and vigorous piece of work; 102, "Windy Night," 100 and 117 have attractive qualities. Nos. 448, 449, of the Blundell's School exhibit, are sculptured examples which deserve special mention. The work of this school retains an excellence which awards it quite a place of its own. There is, in fact, much to praise in this exhibition, in which there is more spontaneous and original feeling than in so much of adult professional art which has lost this springtide exuberance. The exhibition remains open until October 9.



AN OLD FORGE, NEAR LAVENHAM, SUFFOLK.

Irish Town Planning.

WE note that the Dun Laoghaire Borough Corporation have acquired by purchase the 48 acres comprised in the grounds of Killiney Castle on Killiney and Dalkey Hills. These coastal hills form a feature which, for natural beauty in proximity to a capital city, are unsurpassed. Some 35 acres of Killiney Hill have been public property since Queen Victoria's jubilee in 1887, and this new addition will add enormously to the amenity of the Borough of Dun Laoghaire, which may claim not only to be the gateway of, but also the principal seaside resort in, Ireland. The newly-published Survey (reviewed in a recent issue), being on popular lines, presents a new departure, and is intended to bring closer that public co-operation which every town planner desires. We observe that, in this Survey, Mr. Manning Robertson, Town Planning Adviser to the Corporation, mentions the desirability of making as large a reservation as is reasonably possible as an extension of Victoria Hill Park, Killiney.

Green Belts in the United States.

LONDON'S green belt is to be imitated in the United States. The Resettlement Administration of the United States Government are planning three towns, all of which are to be surrounded by a protective area of woodland and farms. One of these has the appropriate name of Greenbelt, and is situated near Washington. This is planned to accommodate a thousand dwelling units. Tracts of land lying south of the town have been set aside for use as allotments, which will be available to tenants who wish to raise their own vegetables, and so supplement their regular income. The second town is called Greendale. This is situated within eight miles from the centre of Milwaukee. Here 3,000 families are to be provided with houses on an area of 3,500 acres. There will be a business centre containing stores, a cinema, a tavern, a garage, and an open-air market. The community centre will contain school-rooms, fine art rooms, a library, and a combined public hall and gymnasium. The third green belt town is called Greenhills, and is situated four miles north of the city of Cincinnati.

The Architects' Ball, Olympia.

THE Architects' Ball, held at Olympia last Friday, was a highly successful function, both as a social event and as a contribution to the Architects' Benevolent Society, which, thanks to the generosity of Mr. H. Greville Montgomery, in defraying the entire cost of the dinner and dance, will benefit to the extent of about £250. A large number of architects and others connected with the industry were present, including Mr. Percy Thomas, Mr. Edward Maufe, Mr. Grey Wornum, Mr. Hubert Lidbetter, Mr. Austen Hall, Mr. C. H. James, and Mr. Alister G. MacDonald. Much of the success of the function was due to Mrs. H. V. Lanchester (chairman, R.I.B.A. Social Committee), the organiser, and to Mrs B. J. Morgan, her assistant.

GENERAL NEWS

Professional Announcement.

Mr. George J. Hughes, registered architect and surveyor, is removing to No. 37, The Square, St. Annes-on-Sea, where he will be pleased to receive trade catalogues, etc.

An Architect's Estate.

Mr. Alfred Douglas Clare, F.R.I.B.A., of Finchley, architect (net personalty £14,306), left £14,431.

The Swan Hotel, Leatherhead.

The Swan Hotel, Leatherhead, which is over 300 years old, has closed. The building will shortly be pulled down and eight shops will be erected on the site.

Sir John Soane's Museum.

Sir John Soane's Museum at 13, Lincoln's Inn Fields, W.C.2, is open free from October 1 on Thursdays and Fridays. During October the hours will be 10.30 to 5, and in November 10.30 to 4. Mr. Arthur T. Bolton, F.S.A., F.R.I.B.A., is the curator.

St. George's-circus Tower.

The Town Clerk of Southwark has written to the Corporation of the City of London asking for the clock tower at St. George's-circus to be removed in order to overcome traffic difficulties at that junction. The Bridge House Estates Committee is recommending the Common Council to agree, and to dedicate the site to the use of the public.

A Memorial to G. K. Chesterton.

An appeal has been issued for £10,000 for the completion of the Church of St. Teresa of the Child Jesus at Beaconsfield as a memorial to Mr. G. K. Chesterton, who worshipped there. Plans have been prepared by Mr. A. Gilbert Scott, F.R.I.B.A. Donations may be sent to Monsignor C. W. Smith, the Presbytery, Beaconsfield, Bucks.

Houses for Agricultural Workers.

A demand that the Government should build 100,000 houses for agricultural workers was made in a resolution passed at the annual Conference of the National Labour Housing Association at Plymouth. The resolution declared that this action was necessary "in view of the impossibility of securing an adequate supply of houses built by rural authorities at rents within the ability of agricultural workers to pay."

Coronation Decorations in Bond-street.

As already stated in our columns, the Architectural Association has arranged a competition among some 170 senior men and women students for Bond-street Coronation Decorations. This took place on September 28 and 29. Competitors were required to prepare drawings and designs showing day and night effects of their schemes. A prize of £30 will be awarded to the student whose ideas are accepted, and there will also be two other prizes of £20 and £10. The judges are Mr. L. H. Bucknell, President of the Architectural Association, Mr. G. Grey Wornum, three members of the staff of the Architectural Association School, a member of the Royal Warrant Holders' Association, and three members of the Bond-street Association.

New Civic Centre for Finchley.

A new civic centre is to be built at Finchley, at an approximate cost of £133,000, on a site near the Great North-road, on the old Finchley Common. An administrative block will house the council staff, now scattered in six different buildings, and a town hall will accommodate 1,100 people. Mr. Percival T. Harrison, M.Inst.C.E., is the Borough Surveyor.

London Association of Master Decorators at Olympia.

In our last issue a report was given of the visit of this Association to the Building Exhibition. Mr. R. S. Williams and Mr. P. C. Brooker were, in error, described as President and Vice-President respectively of the "L.M.B.A." This should, of course, have been "L.A.M.D."

COMPETITION NEWS

Theatre Royal, King's Lynn.

King's Lynn T.C. invite applications from architects to submit designs for the re-erection of the Theatre Royal on the existing site, the dimensions of which are 136 ft. by 61 ft. The inclusive cost of building and seating must not exceed £13,000. A premium of £150 is offered to the architect who is adjudged by the Corporation to have submitted the best design. If the Corporation rebuild according to the design adjudged to be the best, the person submitting the design will be appointed architect for the work, when the premium shall merge into and form part of the fees which shall become payable to him. The Corporation do not bind themselves to rebuild according to the best or any of the designs submitted. Preference will be given to architects who have had experience in the construction of similar buildings. Full particulars will be forwarded on application to Mr. Frank G. Reeves, Town Clerk, Town Hall, King's Lynn.

New Baths, Hackney.

The Hackney Borough Council, on September 23, approved the scheme for the erection of a new central baths establishment at an approximate cost of £150,000. It is proposed that there should be a major pool, with a minimum water area of approximately 165 ft. (or 50 metres) by 45 ft., by 8 ft. by 3 ft. 6 in. (with a 15 ft. scoop for deep diving); a minor pool, 100 ft. by 35 ft., by 8 ft. by 3 ft. 6 in.; and a children's bath, 90 ft by 38 ft., by 3 ft. at either end, and 5 ft. deep in the centre, for the length of 15 ft. for diving and life-saving tuition. The major pool is to be converted for use as a public hall during the winter season, and will include a stage with retiring rooms adjoining. Provision is to be made for Turkish and vapour baths, foam, radiant heat and sunray treatment, and a foot clinic. There are also to be 62 slipper baths for males and 42 for females.

The design for the baths is to be decided by means of a public competition, which will be open to foreign as well as British architects. Premiums of £500, £300 and £200 are being offered.

The assessor nominated by the Royal Institute of British Architects is Mr. F. J. Horth, F.R.I.B.A., of Hull, who has accepted the appointment.

The Baths Committee suggested that the competition should be advertised in journals circulating in this country and in certain foreign countries.

In the discussion which took place, Councillor W. E. Loweth, C.B.E., J.P. (leader of the M.R. Party), in seconding the reference back of the report, said that the majority party having decided to allow foreign architects to enter the competition, the Council had every right to ask in which countries the advertisements were to be circulated. The Municipal Reform Party were opposed to foreign architects coming in at all. They believed, and had every ground for that belief, that British architects were quite capable of designing baths for the needs of Hackney, and any fees that were to be paid should go to a British architect. The chairman of the Baths Committee said they would be guided by the assessor, who was an expert in the matter and who, in consultation with the Town Clerk, would decide which were the best countries to advertise in.

The motion for the reference back of the report was defeated, and the report was adopted.

New School, Worcester.

The following notice has been issued by the Royal Institute of British Architects: "Members of the R.I.B.A. and of its Allied Societies must not take part in the above competition because the conditions are not in accordance with the published regulations of the Royal Institute for architectural competitions."

New Council School, Keighley.

Plans for the erection of a new Council School in Keighley, on land at Guard House, purchased for a housing estate, are to be prepared and an open competition is to be held for architects. The Keighley Education Committee has resolved that the regulations governing the promotion and conduct of the competition be the regulations approved by the Royal Institute of British Architects and its Allied Societies; and that premiums be offered of 30 gns., 20 gns., and 10 gns.

CURRENT COMPETITIONS.

	Particulars published in "Builder."	Sending in date.
Public baths, New York-road, Leeds, for Leeds T.C. Mr. K. M. B. Cross, M.A., F.R.I.B.A., assessor. Premiums of £350, £200 and £100. Questions by September 28. Conditions (dep. £1 1s.) from Town Clerk, Room 57, Civic Hall	Aug. 7	Oct. 29
New Council offices, Farnham, Surrey. Mr. E. Vincent Harris, A.R.A., assessor. Premiums: £250, £200, £150. Last day for questions, August 31. Conditions (dep. £1 1s.) from Clerk, Council Offices, Farnham, Surrey ...	June 26 } July 3 }	Oct. 31
Hospital, Llandudno. Mr. R. N. MacKellar, F.R.I.B.A., assessor. Premiums of £250, £150 and £75. Questions by August 28. Conditions (dep. £1 1s.) from Hon. Sec., New Hospital Scheme, Town Hall, Llandudno	July 10 } July 17 }	Oct. 31
Offices and shops, Newcastle-under-Lyme. Mr. Harry S. Fairhurst, F.R.I.B.A, assessor. Premiums: £300, £200 and £100. Questions by August 31. Conditions (dep. £2 2s.) from Town Clerk, Newcastle-under-Lyme, Staffs	Aug. 7	Oct. 31
Design for Joint Receiving Offices, for the British Railways. Messrs. C. Holden, L. H. Bucknell, W. H. Hamlyn, F.R.I.B.A., and S. Grasemann, assessors. Premiums: £300, £125, £50 and £25. Conditions from Chief Architect, L.M.S. Rly., St. Pancras-chambers, Euston-road, N.W. (Dep. £1 1s.) Questions by September 17	Aug. 14	Nov. 7
New civic buildings to cost £300,000, for Newport (Mon.). Messrs. E. Berry Webber, A.R.I.B.A., and C. F. Ward, F.R.I.B.A., assessors. Questions by September 1. Conditions (dep. £2 2s.) from Town Clerk, Town Hall, Newport (Mon.)	July 24 } Aug. 7 }	Nov. 30
New police stations at (a) Watford, (b) Bishops Stortford, for Herts C.C. Limited to six selected firms. Mr. H. V. Lanchester, F.R.I.B.A., assessor	July 31	Nov. 30
Technical College, for Gloucester T.C. Mr. H. V. Ashley, F.R.I.B.A., assessor. Premiums: £350, £250 and £150. Conditions (dep. £2 2s.) from Mr. H. J. Larcombe, M.A., Belsize House, Brunswick-square, Gloucester, to whom questions by September 26	Aug. 21	Dec. 15
Swimming baths, Holborn, for B.C. Mr. K. M. B. Cross, M.A., F.R.I.B.A., assessor. Premiums of £300, £200 and £100. Questions by October 1. Conditions (dep. £2 2s.) from Town Clerk, Town Hall, High Holborn, W.C.1	Aug. 14	Dec. 31
Extensions, St. Andrew's Cathedral, Sydney, N.S.W. Archbishop of Sydney, Sir G. G. Scott, R.A., and Mr. Bertrand J. Waterhouse, F.R.I.B.A., assessors. Premiums, £500, £300 and £200. Open to R.I.B.A. and allied societies. Conditions (until July 11) from R.I.B.A. Designs to Sydney, N.S.W., by February 28, 1937	June 12 } June 19 }	Feb. 28, 1937
Mental Hospital, Lathom Park, for Lancs M.H. Board. Assessors, Messrs. C. E. Elcock, John Kirkland and Patrick Abercrombie, FF.R.I.B.A. Premiums: £500, £400, £300...	Aug. 21	

CORRESPONDENCE

The Amenities of Seaside Resorts.

SIR,—In your issue for October 11 last year you published a letter from a correspondent dealing with the residential aspect of seaside resorts, and in May last Lord Crawford and Balcarres, in an address to the Council for the Preservation of Rural England, touched upon the same point. In the course of his observations he spoke of the competition between the seaside resorts and the neighbouring boroughs, and said that it was to be feared that, if this process went on, resorts would lose their own personality and freedom of outlook, as everything was concentrated on amusing the holiday-maker and the casual visitor.

There is a great deal of truth in these observations, and the evil is steadily increasing, but not from competition between seaside resorts and neighbouring boroughs so much as from the lack of appreciation on the part of many of the councils of seaside resorts of the asset placed in their hands for administration. The councils of the smaller resorts are often formed of tradespeople, and not the most intelligent of this class, and, as your correspondent pointed out last year, they have set up a common standard founded on something between Bournemouth and Blackpool.

The residential aspect of some of the small seaside health resorts is being entirely lost sight of in this craze for uniformity. Some of these resorts used to attract residents, as well as visitors, who made it a practice to remain for many months, and the conditions of those small towns were far more stable and prosperous than they are now; but the councils have sought to attract visitors of a different type and of entirely different outlook, and to meet their requirements the residential character of the places has been entirely destroyed.

Lord Crawford and Balcarres is reported as having said he was amazed at the standard of comfort, luxury and ostentation which was being set up for hard-working people who came from his own industrial county of Lancashire. He did not know whether this action by seaside towns was for the good of those for whom it was provided, but he was quite sure that it was bad for the towns themselves. There is a great deal of truth in this, but the question is not confined to the actual standard of luxury provided, as the fault lies in the lack of discrimination shown by the councils. The visitors drawn from industrial centres are not satisfied by the natural beauties and outdoor amenities provided at resorts famed for their natural beauty, but require indoor amusements and artificial distractions out of doors, such as fun fairs, switchbacks, etc. When visiting a quiet resort they grumble at its slowness and describe it as a "dull hole," and the local Press urges the Council to more efforts in this direction.

The results are disastrous: in the summer season large profits are made, and to attract this seasonal population little houses are run up and used as "Guest Houses," and the amenities of the resort are destroyed. Then comes the winter, and the owners of these houses fail to earn a living, and poverty and unemployment become rife in seaside resorts which formerly enjoyed prosperity owing to the presence of a permanent population made up of residents and visitors for long terms.

Lastly, there comes the invasion of the "Holiday Camp," a vast number of huts run up in a few months, with a common dining-room and offices, a movement entirely unsuited to these days of town planning and consideration for such things as overcrowding and the other amenities of life.

In the dead levelling down of all seaside resorts to one model the nation is losing the valuable asset provided by the smaller and quieter seaside resorts both for health and rest, and, in fact, receiving no return to compensate for the loss, and the natural beauty of the quieter resorts is destroyed.

B. D. K.

Bath.

"THE BUILDER" DEBATE

LXXXIX.—ARCHITECTS AND ELEVATIONS.

"That the Town and Country Planning Act should be amended to give Local Authorities powers to approve or disapprove elevations only under the advice of a qualified architect."

SIR,—This debate appears to have touched upon more fundamental matters than its bare terms would suggest. The idea which "Negative" evidently has at the back of his mind is that it is impossible to impose upon the community, by means of legislation, a standard of taste which it does not naturally possess, and he therefore rightly feels that any amendment of the law as it stands, by the trifling degree expressed in "Positive's" motion, is not only futile but liable to give an impression of action which has no real depth.

There is no doubt that these matters cannot be regulated by a number of pettifogging laws, which restrict building without improving standards of design. The solution is, as "Negative" suggests, that the law should make it necessary for skilled jobs to be carried out by those who have been trained in the right sort of skill. If architecture is entrusted only to properly trained architects, the standard of design is bound to improve enormously; and conversely, so long as architecture may be practised by those who have had no training or experience, there can be no improvement in design, however much we hedge the unskilled designer about with voluntary panels whose duties terminate on paper.

If the community at large is as concerned with the protection of the amenities as the new Acts suggest, it must be prepared to face the matter out bravely, and to entrust itself to a profession that has hitherto done nothing to forfeit its confidence.

I would like also to refer, very lightly, to this matter of the Modernists, which has been cited by "Positive" as providing one reason why further reliance should not be placed upon the architects. This is quite distinct from the subject of this debate, though it should be dealt with, rather than leave an impression that there is something in this point.

Whether architectural design is in a healthy or unhealthy state at the present time is a matter for difference of opinion. For my part, I have no doubt that there are more well-trained young architects to-day than ever before, and that if there is anything false in the manner of design most have adopted, it will quickly find itself out. Then, the good training they have received will assist them to get back "on an even keel."

I think it is therefore quite clear that to "send the profession to Coventry" because we do not agree with unimportant details of the modern fashion would be a policy of despair. To whom could we look for guidance in matters of taste in building if we do not allow ourselves to refer to the architects? "Positive" does not supply an answer, unless he would like to set himself up as a dictator of taste.

PRACTICE.

R.I.B.A. EXHIBITIONS

ALTHOUGH the scheme for the formation of a permanent R.I.B.A. collection of photographic enlargements of modern architecture has been in operation barely a year, its value, we are informed, is already becoming apparent. In addition to the regular touring exhibitions which have been sent out, demands are being received for appropriate photographs to be lent to trade exhibitions. Early this year a selection of photographs of hospitals and sanatoria was supplied to the Public Health Exhibition at South Kensington. A similar group, but of hotels and restaurants, was lent to the Wine and Food Exhibition.

These are but small beginnings in a special side of the exhibition organisation, of which the value to the profession will be apparent. These groups of photographs at trade exhibitions are inevitably of direct technical interest to almost all those who see them. It is, however, essential that such exhibits should be instantly available from stock, as demands are usually made at short notice when promoters of exhibitions wish to fill space that has not been let. The steady work of a committee of thirty-eight voluntary selectors is gradually increasing the permanent collection and making more and more of these sectional exhibitions possible. Not less important is the readiness that architects are showing to present the photographic enlargements of their works when asked.

The first year's working of the organisation is best shown by the fact that R.I.B.A. exhibitions were visited by 120,000 persons between June 1, 1935, and May 31, 1936, a year that the Exhibition Committee had decided should be devoted mainly to preparatory work. In this period the Everyday Things Exhibition and the small Exhibition of British Architecture of To-day began their tours, while the International Exhibition of Architecture concluded its tour in its complete form. Sections of the last are now being shown in a few places. Two new exhibitions are being created in 1936-37, the first of which is one on "Civic Centres"—already booked for a year. Other smaller exhibitions for trade and similar shows will be created according to demands and the ability to supply them.

SYNAGOGUE AT HAMPSTEAD GARDEN SUBURB.

MR. MORRIS DE METZ, A.R.I.B.A., Architect.

SOME PRINCIPLES OF PROTECTION IN AIR RAIDS

By COLONEL W. GARFORTH, D.S.O., M.C., R.E. (Retd.).
(Air Raid Precautions Department, Home Office.)

THE Air Raid Precautions Department is a civil Department and is part of the Home Office. For many years the problems connected with the protection of the civil population against gas were considered by sub-committees of the Committee of Imperial Defence, but the whole matter was treated as secret. In May, 1935, the Air Raid Precautions Department was formed and took its place as part of the Home Office.

The activities of the Department extend in many directions, and these include the passive protection of the entire civil population. An air raid precautions organisation is being built up by local authorities. The Department is also in touch with factories throughout the country, and the managements of these organisations and of large business premises are being asked to prepare their own air raid precautions schemes so far as they are able. For this purpose lectures on the principles of protection in air raids are being given to factories, business organisations and Chambers of Commerce.

Air Bombardment of the Future.

The air bombardment of the future would be very different from anything of a similar nature which took place in the last war. To illustrate this it may be mentioned that the speed of modern bombing aeroplanes varies from 180 to 300 miles an hour. Also the weight of bombs which could be dropped in this country in one day in the next war might bear little relation to the amounts dropped in the last war.

Great advances have been made in the design of aeroplanes, instruments and the technique of bombing, and all these considerations make it imperative that attention should be paid to the question of protection against air raids.

Bombs and Protection.

Before going into details of what a modern air bombardment will be like, one or two remarks regarding bombs may be of interest. Bombs do not strike the ground at right angles. In other words, the angle of arrival is inclined to the vertical. This inclination in the case of bombs dropped from, say, 16,000 ft., is 16 deg., and from 2,000 ft. is 38 deg. The height at which bombs can be released may vary from 20,000 ft. and over down to 1,000 ft. and under.

In an air bombardment three kinds of bombs can be used—the incendiary bomb, the gas bomb and the high explosive bomb. Each will be dealt with in turn.

The Incendiary Bomb.

The incendiary bomb may vary in weight from 1 kilo (*i.e.* 2 lb. 3 oz.) up to 60 lb. It is expected that the light kilo bomb will be more freely used than those of greater weight.

Experiments to determine the penetrative powers of the kilo bomb are now being undertaken, but it is known that this bomb will penetrate all forms of light roof, such as tiles, corrugated iron, slate, fibrous cement sheeting, glass, ruberoid, etc. Its penetration will, however, probably be arrested by the top floor of the building. Here the bomb would continue to burn for about ten minutes and would set on fire any inflammable materials in the vicinity, such as furniture, bedding, curtains, etc. A reinforced concrete roof 4 in. to 6 in. thick would probably, however, resist penetration by the kilo bomb, in which case the bomb would ignite on the surface of the concrete and then burn itself out.

As the bomb generates its own oxygen, it is not easily extinguished, and experiments are now being carried out to determine the best way of dealing with it. The cheapest and most readily available form of protection is to clear the attic or upper rooms of all inflammable material and to cover the floor with fine dry earth about 2 in. thick. A greater quantity of material affords even more adequate protection, but it should be borne in mind that attic floors might not be strong enough to carry more than 2 in. of this material. Similarly sheet iron (about 18 g.) or $\frac{3}{8}$-in. asbestos boarding (free from cement) can be used in place of the dry earth.

Although an incendiary bomb cannot be actually extinguished by sand, something may be done to control it by applying about 30 lb. of this material with a long-handled shovel. By this action the glare is reduced and the spread of the fire will be limited. Flames, however, will come out of the top of the sand. Chemical extinguishers, water, etc., can be used to limit the spread of fire. The water or chemical extinguisher should not be applied to the bomb itself but should be used to keep the surrounding woodwork wet. If the bomb has been partially controlled with earth, it can be picked up with a shovel and put in a bucket or other suitable container, which already contains 2 in. or 3 in. of dry earth or sand. Further earth or sand should then be poured in the bucket before removing it from the building. In order to enable a person to approach the burning bomb, non-inflammable dark glasses are essential.

Gas Bombs or Spray.

The weight of a gas bomb will vary from a few pounds up to 250 lb. and even more. The container weighs less than half of the total weight of the bomb.

Air Raid Precautions Handbook No. 1 (Personal Protection Against Gas), which can shortly be obtained from H.M. Stationery Office, contains much information regarding gases which will be used in war. It is not necessary here to do more than mention that there are two main types of poison gas which might be used, namely: (1) persistent; (2) non-persistent.

Persistent gases usually consist of liquids (*e.g.*, mustard gas), which contaminate the area on which they are released, and may continue to give off vapour for hours, days, or even weeks, if not neutralised. Non-persistent gases, when released, rapidly mix with the atmosphere and disperse quickly.

As regards respirators, there are three types, the Service respirator, the Civilian Duty respirator, and the General Civilian respirator.

The Service respirator, which is the type used by the defence services, will be used by those who must enter and remain in heavy concentrations of gas, such as policemen, firemen and members of decontamination squads.

The Civilian Duty respirator is intended to afford protection to persons who have to carry on their normal duties in the presence of poison gas, but who are not likely to be exposed to such high concentrations as the defence services, police, etc. The General Civilian respirator is intended for use by members of the general public. All the above respirators are designed to protect the wearer's eyes, face and lungs from any known poison gas which may be used in warfare.

High Explosive Bombs.

High explosive bombs carried by aircraft weigh anything up to 3,000 lb. each. A bombing aeroplane can carry from two to three tons of bombs. Owing to the great expense of the heavier type of bombs, such as those weighing 1,000 lb. and over, it is unlikely that these will be used except against special targets such as arsenals, dockyards, railways, etc. Those weighing under 1,000 lb. will, however, be quite common, and the effect of these bombs may be classified under two heads, namely fragmentation and blast.

Fragmentation is the breaking up of the shell of the bomb into small pieces, which inflict damage to material and personnel in the vicinity.

Blast is the sudden creation of high air pressure designed to shatter buildings, machinery, etc., which may be exposed to it. The effect of blast dissipates rapidly, but in the case of heavy high explosive bombs bursting, say, less than 50 ft. away from a building, the effects of blast may be considerable. Most buildings would probably suffer severely.

High explosive bombs may be of two kinds: (i) those intended to explode on contact with a hard surface, in which case they are fitted with percussion fuses, and (ii) those intended to penetrate deeply into the ground or into a building, in which case the bomb is specially strengthened and fitted with a semi-armour piercing nose.

A 500-lb. bomb fitted with a percussion fuse, when falling on a large multi-storied building, would detonate on the roof, or certainly on the top floor, bringing down a considerable part of the building with it. Medium and heavy bombs fitted with a semi-armour-piercing nose would penetrate right through such a building, down to the basement before detonating, when a great deal of damage would be done.

Protection from high explosive bombs fitted with percussion fuses would be afforded by highly reinforced concrete about 5 ft. in thickness, but the semi-armour-piercing bomb must also be considered.

Protection from 500-lb. high-explosive bombs fitted with semi-armour-piercing noses can only be secured by constructing shelters at considerable depths below ground level, say, 50 ft. to 70 ft., or by protecting the shelter or basement by an independent mass of concrete highly reinforced from 12 ft. to 15 ft. thick. As both these forms of protection are very costly, it will, as a rule, not be possible to provide protection against direct hits of medium and heavy semi-armour-piercing high-explosive bombs. In exceptional cases, however, such as vaults for banks or other special buildings, such protection may not be out of the question.

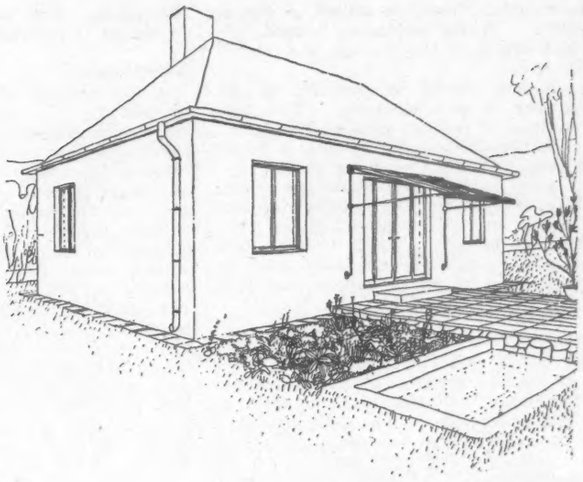
Efficient protection can, nevertheless, be provided against the effects of blast and splinters from the explosion of high-explosive bombs. Good protection can be afforded in cellars or basements or specially constructed underground shelters. In the absence of this form of protection, shelter can be obtained on any floor of a building, provided the shelter is made gas-tight. And, in the case of ground floors, sandbag walls (or sand or earth between shuttering) across the window and door openings can be provided to prevent the ingress of splinters.

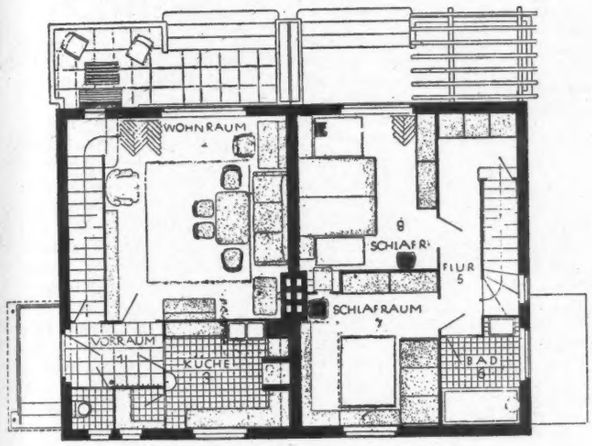
Thickness of Materials to Resist Penetration.

The following thicknesses of various materials will resist penetration by splinters from a 500-lb. bomb exploded at a distance not nearer than 50 ft. away from the materials named: Mild steel plate, $1\frac{1}{2}$ in. (special steels may give increased resistance); stock bricks in cement mortar, $13\frac{1}{2}$ in. solid and $15\frac{1}{2}$ in. hollow (with 2-in. cavity); ordinary concrete not weaker than 6-1 mixture, 1 ft. 3 in.; reinforced concrete, 12 in. (normal structural reinforcement); reinforced concrete, 10 in. (specially reinforced to resist the punching shear effect of the splinters); sand or earth, 2 ft. 6 in.; shingle or ballast, 2 ft.; shingle contained between steel plates, front plate $\frac{1}{4}$-in. thick, back plate $\frac{1}{2}$-in. thick, 10 in.; coal (lump or dust), 2 ft. 6 in.; brickbats, 2 ft.

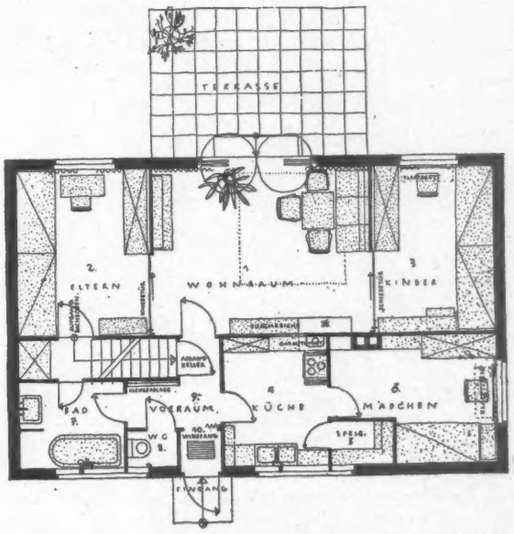
Trenches.

If suitable protection for personnel cannot be found in a building, excellent protection can be obtained in shelter trenches 7 ft. deep, with passageways 2 ft. wide. Recesses suitable for the accommodation of, say, 10 men seated, are cut off these passageways. The trenches should, of course, be revetted. Various forms of revetment can be used, such as boarding, corrugated iron, or other suitable materials. The trench can be made gas-proof by covering it with 2 ft. of earth supported on corrugated iron. If rubble is available, a layer of 9 in.

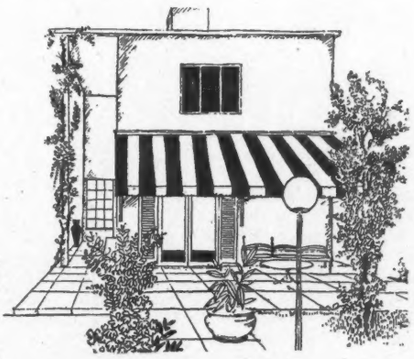


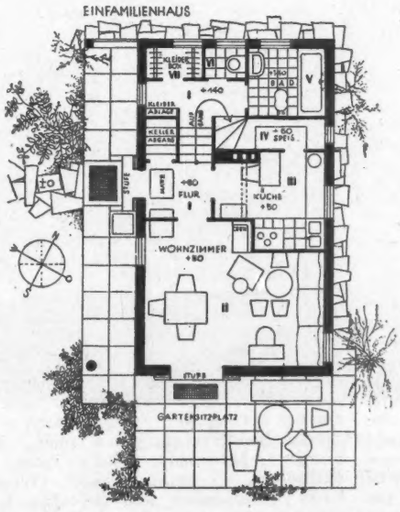


SEMI-DETACHED HOUSES.
BY ERICH BOLTENSTERN AND EUGEN WACHBERGER.

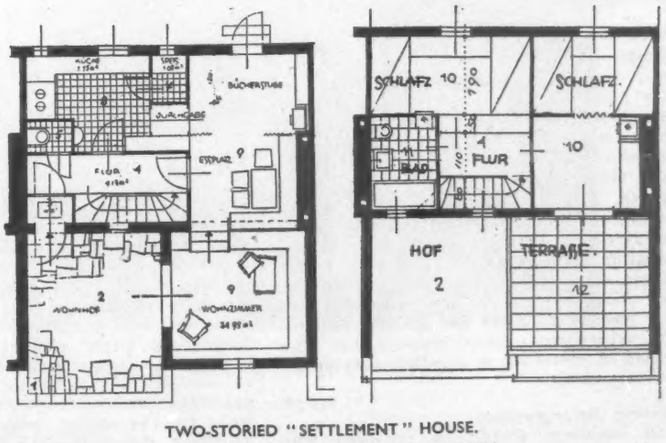


ONE-FAMILY BUNGALOW. BY FRITZ JANEBA.





DETACHED TWO-STORIED ONE-FAMILY HOUSE. BY ALFONS HETMANEK.



TWO-STORIED "SETTLEMENT" HOUSE.
BY HUBERT MATUSCHEK AND ERWIN POCK.

AN AUSTRIAN SMALL HOUSE COMPETITION: Prize-winning Designs.

(See page 634.)

of this material should be placed on top of the earth. Where revetment is used, the excavated width of the passage way should be 2 ft. 10 in.

An air lock should be provided in the passage way at each entrance. This may take the form of two gas curtains 4 ft. apart, with a shelf at the side of the trench on which the curtains are placed when not in use.

A diagram of a trench system for accommodating several hundred people, together with notes on the construction of the trenches, can be obtained from the Air Raid Precautions Department. Similarly, notes on the construction of mined galleries are supplied by the Department.

Shelters and Gas-tight Rooms.

Information regarding the making of a room gas-tight is given in the Handbook for Factories which will shortly be on sale at H.M. Stationery Office. The same principles apply to making large basements, etc., gas-tight.

As regards shelters in general, certain points should be borne in mind. These include a supply of water independent of the normal water supply mains, which may, of course, be damaged; an independent lighting system, sanitary arrangements, a supply of food and self-contained wireless. Further notes on this subject can be obtained by application to the Department.

As regards the selection of cellars or basements as shelters, it is most important to bear in mind the possibility of flooding. In the case of cities where high pressure mains (which may be damaged by high explosive bombs) exist close to cellars or basements, this danger of flooding is very real, and unless it is quite certain that there is no possibility of flooding in this way, cellars or basements should be avoided as shelters. This is a point which may easily be overlooked and which demands special attention.

In the case of newly constructed shelters, the ceiling should be designed to carry the weight of debris resulting from the demolition by high explosive bombs of, say, part of the building above it. For this purpose it is estimated that the floor should be strong enough to carry a superincumbent weight of 4 cwt. per foot super. The unsupported span of floors over the shelter (which form the roof of the shelter) should not exceed 15 ft. to 20 ft.

Dispersion.

In cases where it is not possible to find protection in buildings or specially designed shelters, and where open ground is not available for trenches, the operatives of large factories and business premises may be dispersed to their homes. This, however, must be done within the warning period.

Warning of Raid.

The country has been divided into areas, and when the raiders reach a certain distance from any particular area that area is warned. With the great speed at which modern aircraft travel, it will be unwise to count on receiving more than 7-10 minutes' warning.

Protection of Material.

Buildings such as power houses, first-aid posts, hospitals, telephone exchanges, and other buildings of vital importance will require special protection. This may be given in the form of sandbag walling across doors and windows and, in some cases, along the walls, etc.

In the case of large factory buildings, the question of protection of machinery has been considered. Sandbag traverses or traverses consisting of other materials such as bricks, shingle, etc., can be constructed for this purpose. Steel netting has even been suggested as a means of protection against splinters, but experiments have shown that this method of protection is unsatisfactory and is also very costly.

Lighting Arrangements.

All buildings should be provided with means of preventing lights being seen from the outside. This may be effected, of course, by means of carefully fitting blinds.

Camouflage.

A few remarks about camouflage may be of interest. The object of camouflage is to disguise an object. In the war it will be remembered that whole battery positions were covered by scrim netting which, from the air, made the position appear as open fields, etc., and while a certain amount can be done to make it more difficult for the enemy pilot to pick up his target, the shadows cast by vertical walls, etc., are the main difficulty to contend with. Tanks and gasometers can be rendered less conspicuous by painting the tops the same colour as that of the surroundings, with the sides painted of a similar colour, only a lighter shade. In addition, grey streaks can be painted across the roof and down the sides to simulate roads, and the outline of the tank or gasometer can be broken up by patches of black or other colour. In the original lay-out of a factory, something can be done by avoiding straight roads, judicious planting of trees, and avoiding shiny surfaces as far as possible. The main object to bear in mind is that if anything can be done to make it more difficult for a raider to pick up his target, something has been achieved.

Smoke.

The question of smoke is receiving careful consideration by the Department. If a smoke cloud is formed to conceal a target, it should cover, roughly, nine times the area of the target in question. Although smoke clouds to cover targets of any considerable area are, therefore, costly to maintain, the matter is receiving careful investigation, as it is considered that, in certain cases, smoke will be useful in making it more difficult for the enemy to recognise and pick out his target.

Books being Prepared by the Air Raid Precautions Department.

Books and memoranda on the subject of "Air Raid Precautions" have been, or are being, prepared by the Department.

A.R.P. Handbook No. 1 (Personal Protection against Gas) and Handbook No. 2 (First Aid for Air Raid Casualties) can be obtained from H.M. Stationery Office.

A.R.P. Handbook No. 6 (Factories) will be available shortly from H.M. Stationery Office. This book explains how the managers of factories and large business premises can prepare their own air-raid precaution schemes.

A very important book—namely, Handbook No. 5 (Structural Precautions against Bombs and Gas) is now under preparation. This book will be of a technical nature and will afford detailed guidance to architects, engineers, local authorities and others on certain of the matters referred to in these notes—*e.g.*, the construction and adaptation of shelters and the protection of buildings of different kinds.

Such structural precautions may include a concrete roof to keep out light incendiary bombs, the use of fire-resisting materials in building, the roofs of shelters to be strong enough to take the weight of falling debris—*i.e.*, calculated to stand a weight of 4 cwt. per foot super—framed structures (steel or reinforced concrete) preferable to the old solid type of structure, and the use of non-absorbent building materials where there is danger of contamination by liquid gas.

The Preparation of Air Raid Precautions Schemes.

All managers of factories and business premises employing over, say, 100 operatives, are urged to prepare their own air-raid precaution schemes. Notes giving the suggested headings for such schemes are obtainable from the Department.

Beyond the preparation of a carefully thought-out paper scheme, which can be readily put into operation without delay should an emergency arise, no further action is now suggested. Arrangements should, however, be made for the supply, without delay, of the necessary materials—tools, sandbags, earth, etc.—if and when required.

While it is hoped that the necessity for putting such a scheme into operation will never occur, it is incumbent on all in authority to prepare one. The preparation of an air-raid precaution scheme does not mean the inevitability of an air raid any more than the taking out of a fire insurance means the inevitability of a fire. Furthermore, it is hoped that architects will give the question of structural precautions their careful thought and consideration, as the safety of many thousands of their countrymen may depend on their labours in this direction.

Assistance of the Air Raid Precautions Department.

Finally, it may be stated that the Air Raid Precautions Department is always at the disposal of anybody who may require its advice and assistance.

AN AUSTRIAN SMALL HOUSE COMPETITION

A COMPETITION for the design of small houses was recently promoted in Austria by the "Novadom" Research Bureau, all Austrian architects who are members of the Central Association of Austrian Architects having been invited to take part. From an article on this competition which we have received from Mr. Z. V. Franz Schacherl, a Vienna architect, we take the following summary:—

"Novadom" building method, devised and invented by two Vienna scientists, consists in replacing mortar joints with petrified wood-wool slabs. In other respects the old type of brickwork wall remains unaltered—the bricks are placed one beside the other, face to face, without leaving spaces in between for the vertical joints. On the course formed in that manner a petrified wood-wool slab is laid. Then follows the next course, the next slab, and so forth. Laboratory experiments, coupled with practical tests, show that "statically high-grade brick bodies" can be built dry and that the strength of the dry-built wall is not less than that of mortared brickwork made with the best cement.

In the competition referred to above small houses had to be designed to occupy a minimum area at the cheapest cost. The reduction in cost, through the new building method, had to be demonstrated, and account had to be taken of the characteristics of the new building material.

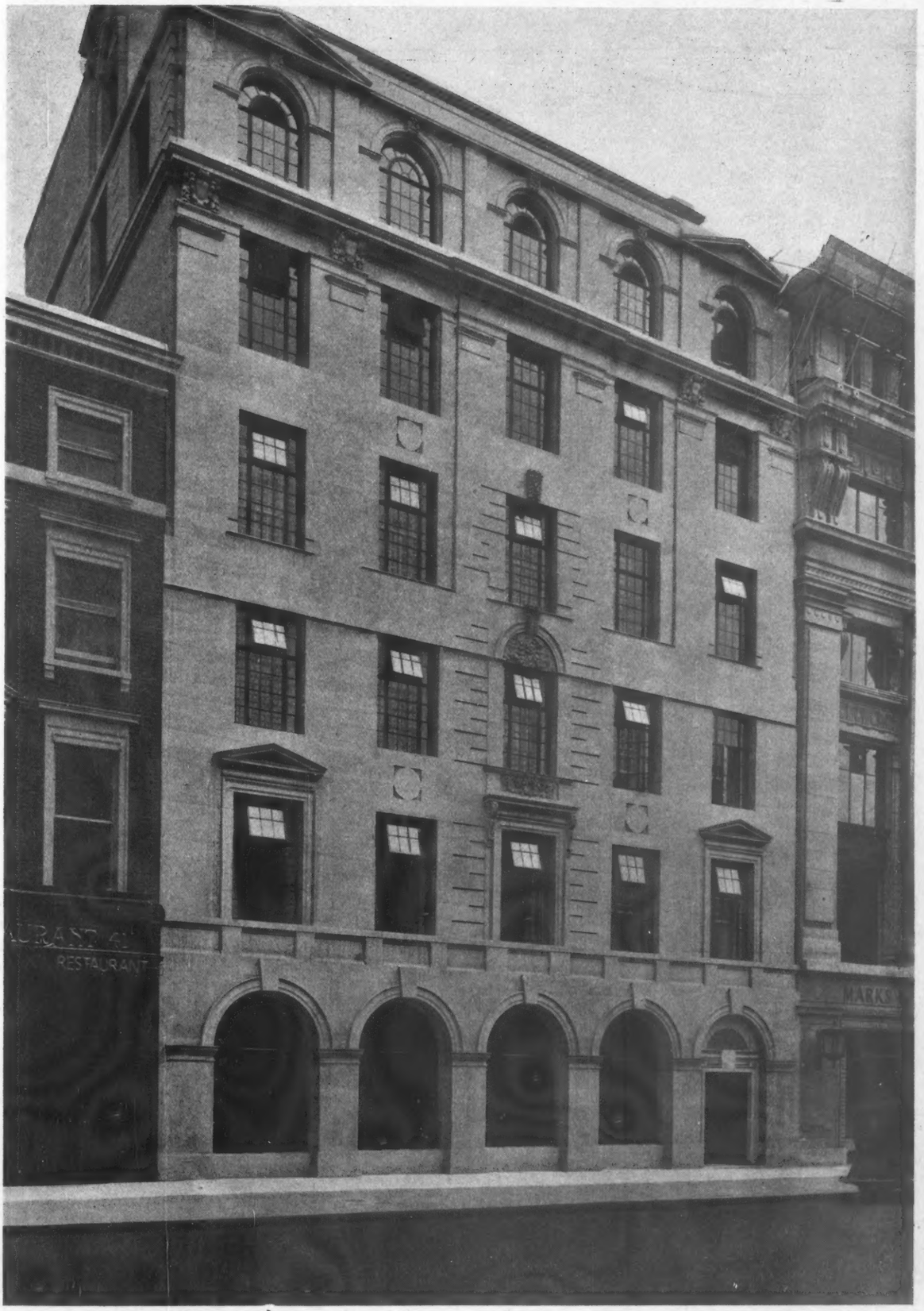
Ninety-five designs were submitted in the competition, and it is stated that proof has been adduced that it is possible with this system of building to erect small dwelling-houses, meeting with all the requirements of their inhabitants, at very low cost.

The prize-winning designs showed good planning, and an economical utilisation of the space available. In conformity with the requirements of the new building method, superfluous and costly recesses and projections were barred. Thus simplicity of structure was obtained, wall sizes and openings being conditioned by the building method.

However different the individual designs, the results, from the economic point of view, were, it is stated, uniform. In all estimates a considerable reduction of building costs was achieved, the saving in "Novadom" surrounding walls, 25 cm. thick, made from hollow bricks, amounting to about 14 per cent. over mortared brickwork, whilst with 38 cm. solid brickwork the saving was 42 per cent. on an average.

The system is said to have thermal, acoustic and hygienic advantages, and it also allows of the continuance of building in winter through periods of severe frost.

Prize-winning designs are reproduced on page 633. NOTE: Wohnraum and Wohnzimmer = reception room; Eltern = parents' room; Kinder = children's room; Kuche = kitchen; Madchen = maid's room; Bad = bathroom; Vorraum = hall; Windfang = lobby; Schlafraum and Schlafz = bedroom; Kleider box = clothes; Speis = pantry; Essplatz = dining-room; Hof = courtyard.

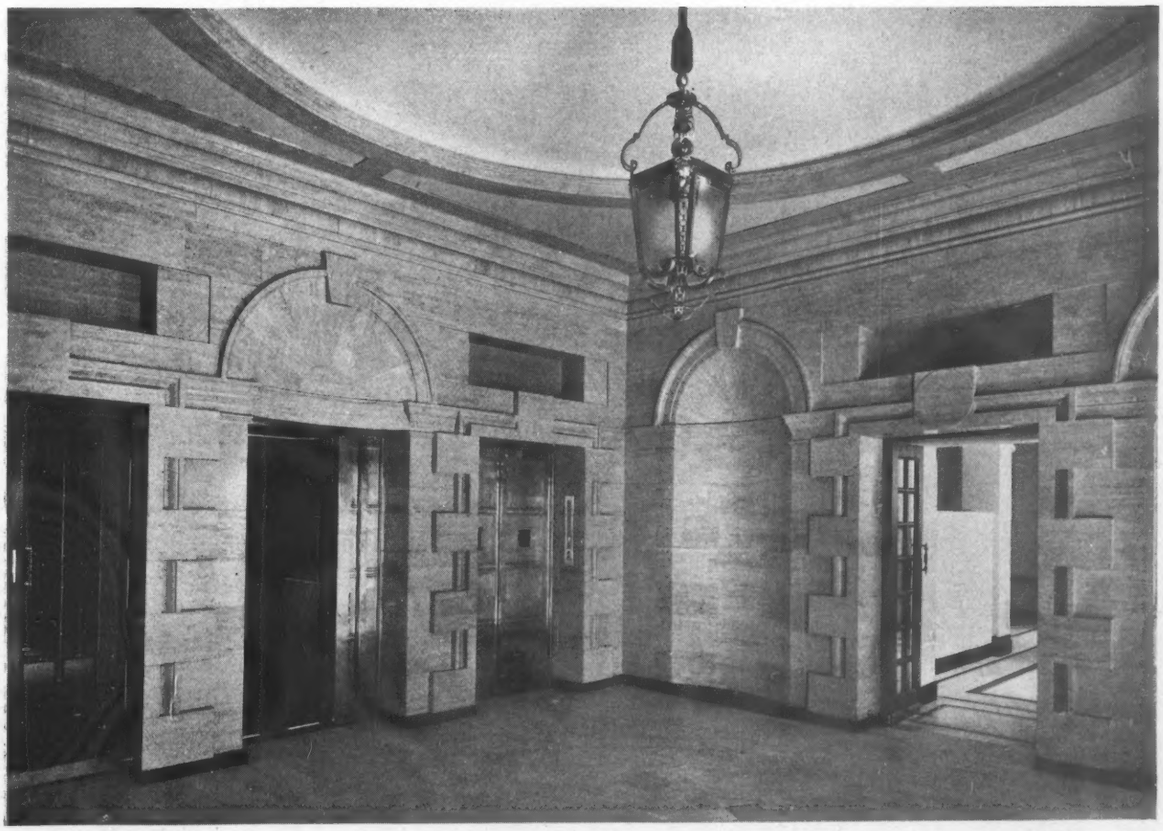


EXTENSION OF MESSRS. MARKS AND SPENCER'S HEADQUARTERS, BAKER STREET, W.

MESSRS. ROBERT LUTYENS AND W. A. LEWIS AND PARTNERS, Architects.

(See page 649.)

MR. SIMON MARKS' ROOM.

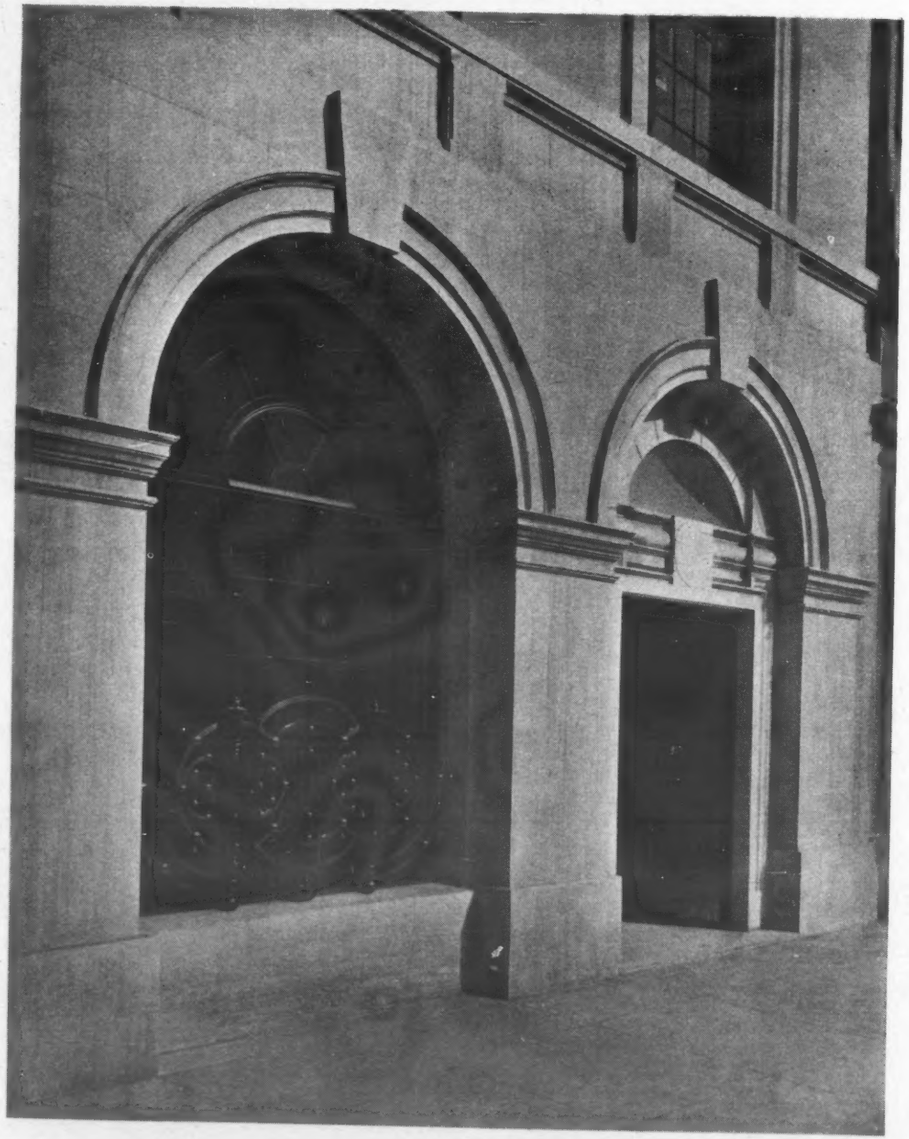


ENTRANCE HALL AND LIFTS.

EXTENSION OF MESSRS. MARKS AND SPENCER'S HEADQUARTERS, BAKER STREET, W.

MESSRS. ROBERT LUTYENS AND W. A. LEWIS AND PARTNERS, Architects.

(See page 649.)



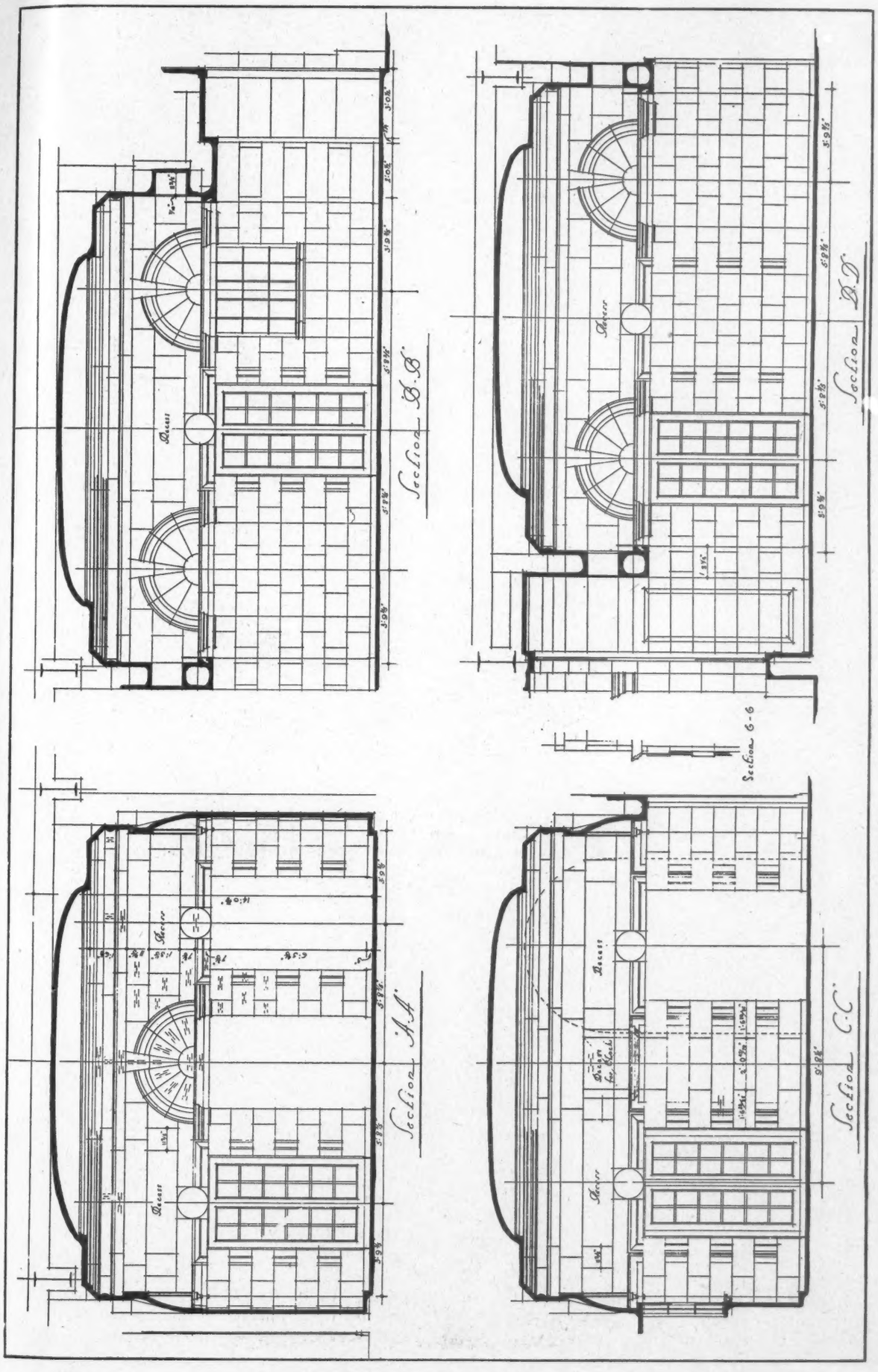
DETAIL OF EXTERIOR, GROUND FLOOR.

A CORRIDOR.

EXTENSION OF MESSRS. MARKS AND SPENCER'S HEADQUARTERS, BAKER STREET, W.

MESSRS. ROBERT LUTYENS AND W. A. LEWIS AND PARTNERS, Architects.

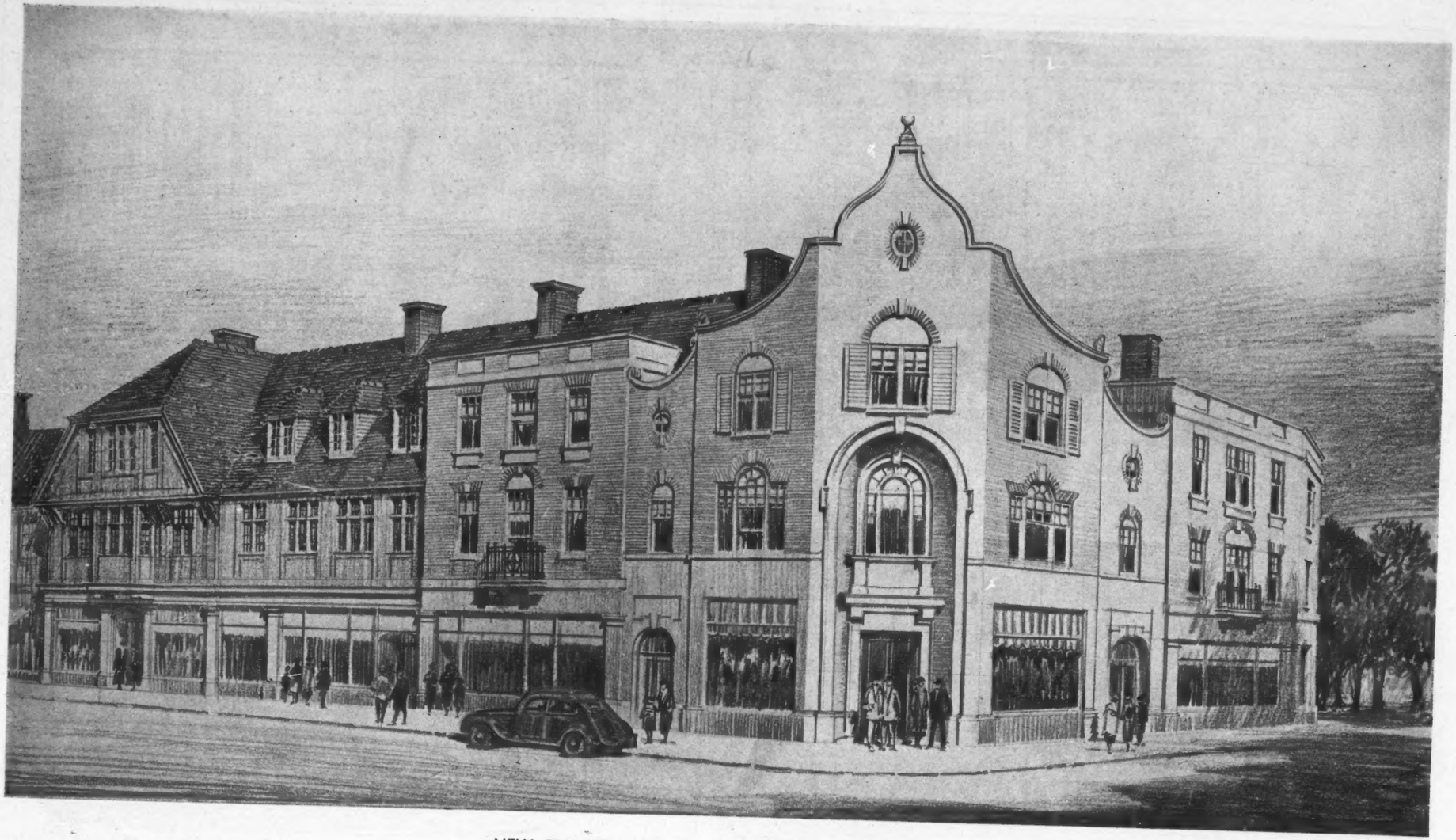
(See page 649.)



EXTENSION OF MESSRS. MARKS AND SPENCER'S HEADQUARTERS, BAKER STREET, W.: Entrance Hall.

MESSRS. ROBERT LUTYENS AND W. A. LEWIS AND PARTNERS, Architects.

(See pages 649 and 653.)

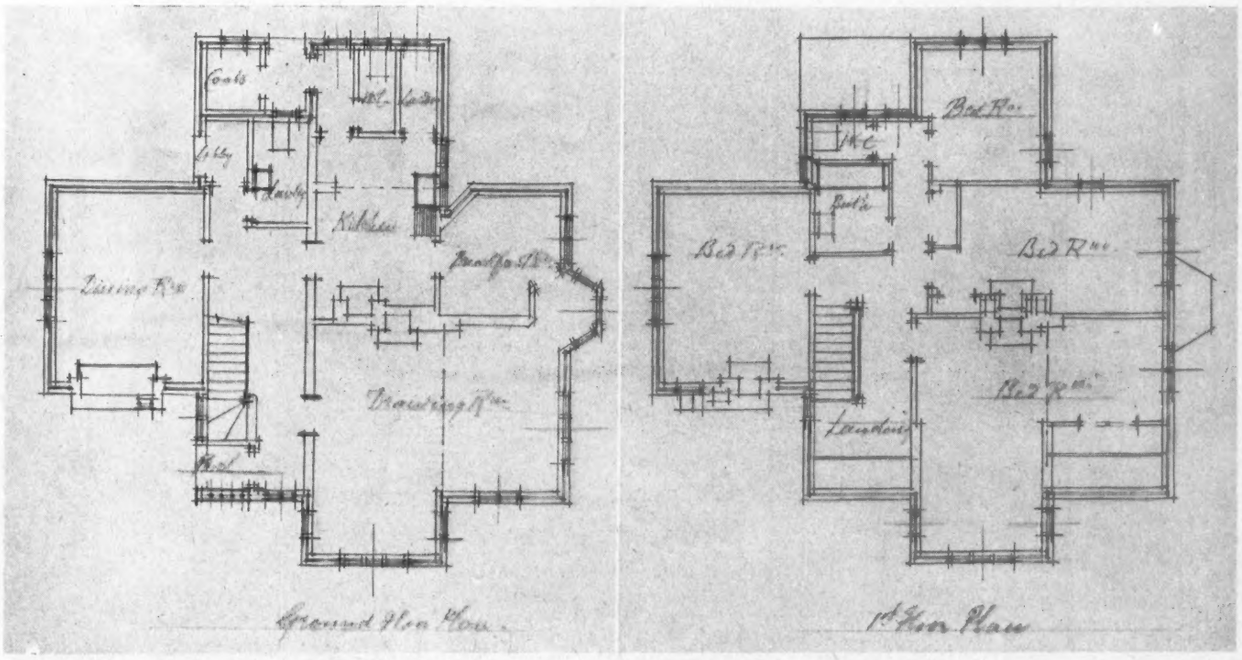


NEW PREMISES, MANOR FARM ESTATE, SHEPPERTON.

MR. GEORGE J. SKIPPER, F.R.I.B.A., Architect.

(See page 649.

ENTRANCE FRONT

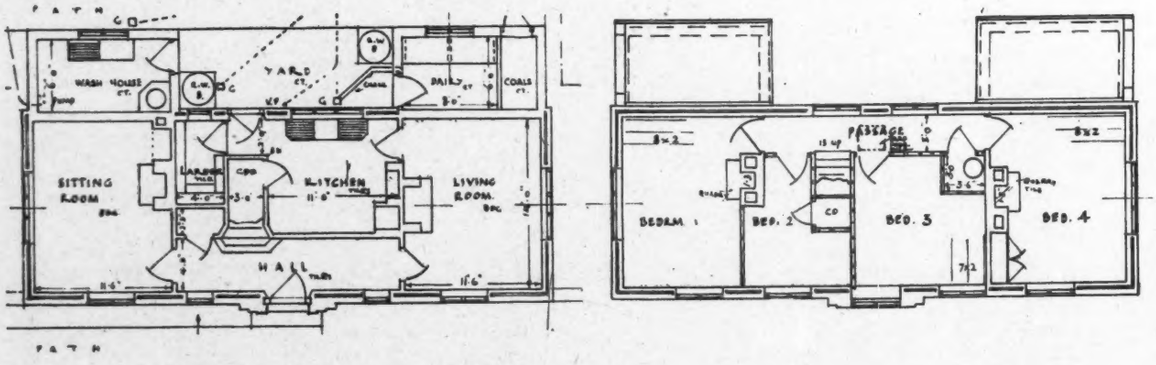


A HOUSE AT GREAT MISSENDEN BUCKS.

MR. GEORGE J. SKIPPER, F.R.I.B.A., Architect.

(See page 649.)

ENTRANCE FRONT.



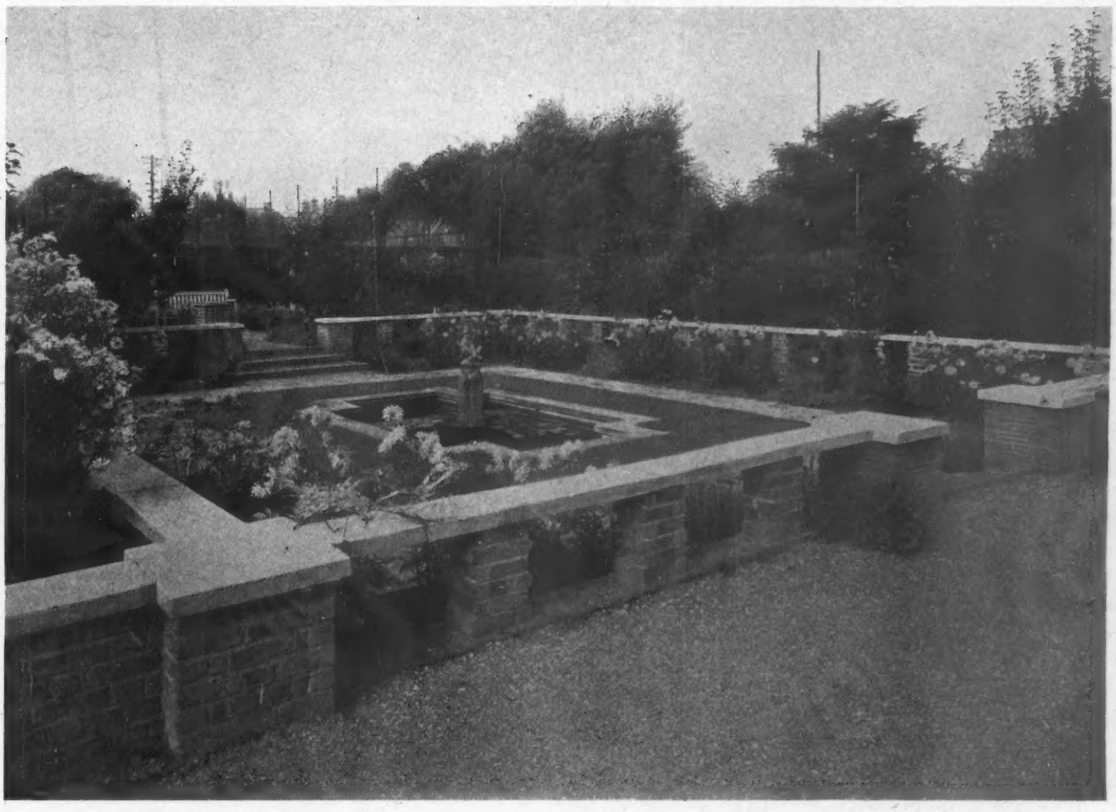
GROUND PLAN

FIRST FLOOR

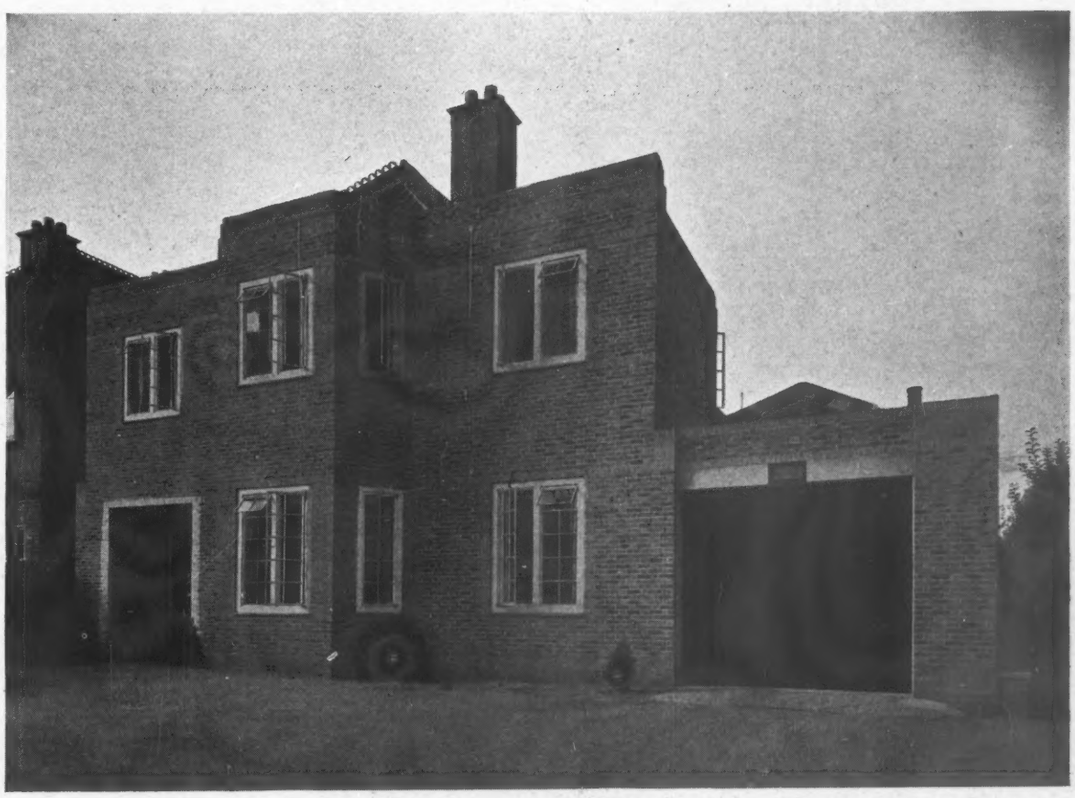
A FARMHOUSE AT WICKMERE, NORFOLK.

MR. STANLEY J. WEARING, F.R.I.B.A., Architect.

(See page 649.)



THE GARDEN.

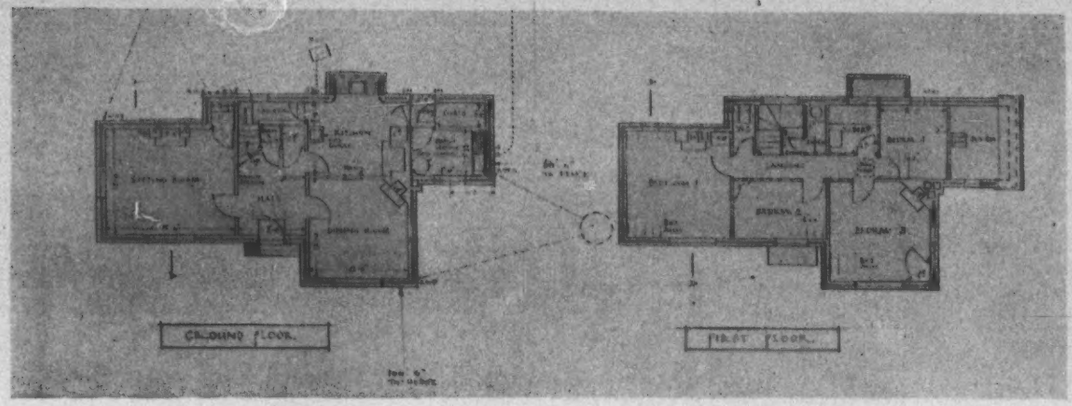


ENTRANCE FRONT.

ALTERATIONS TO A HOUSE IN CHRIST CHURCH ROAD, NORWICH.

MR. STANLEY J. WEARING, F.R.I.B.A., Architect.

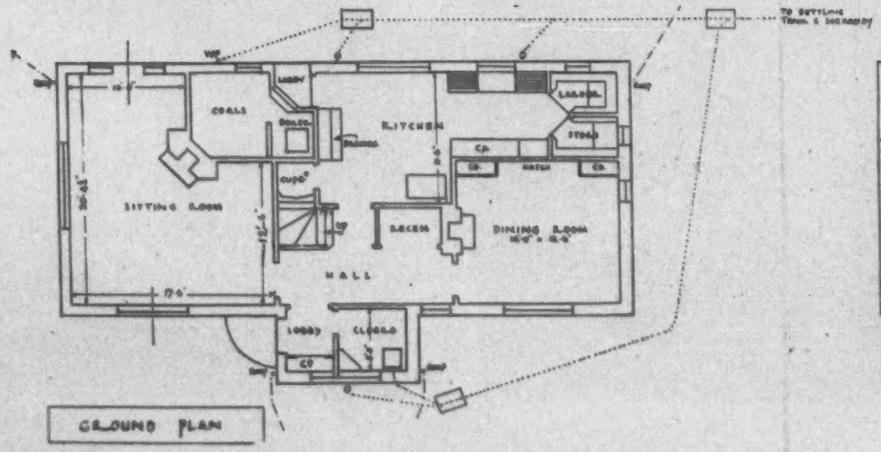
(See page 649.)



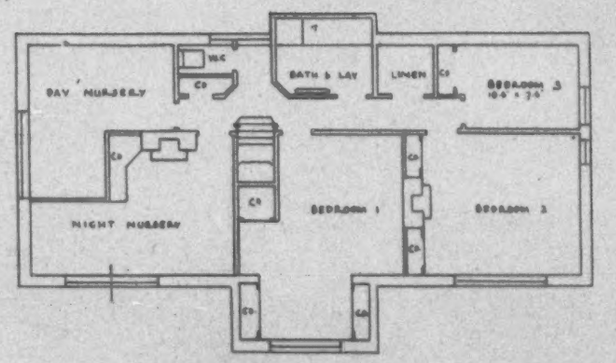
A HOUSE AT THETFORD, NORFOLK. MR. STANLEY J. WEARING, F.R.I.B.A., Architect.

(See page 649.)

ENTRANCE FRONT.



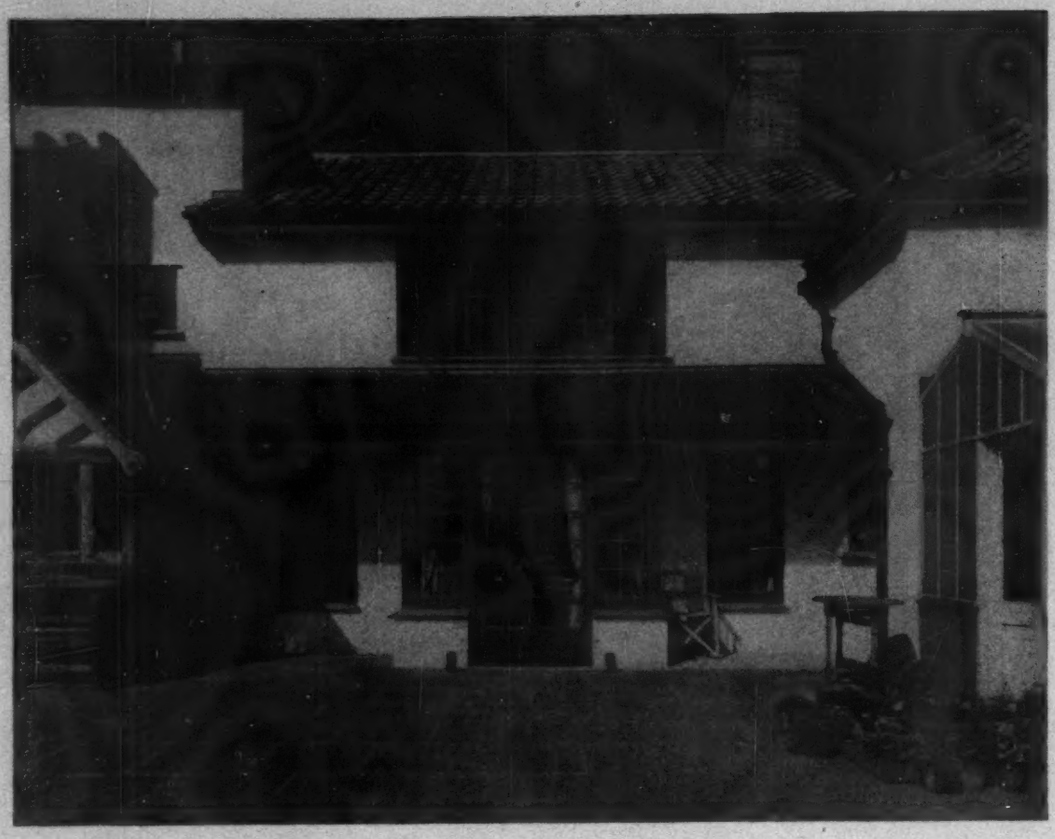
GROUND PLAN



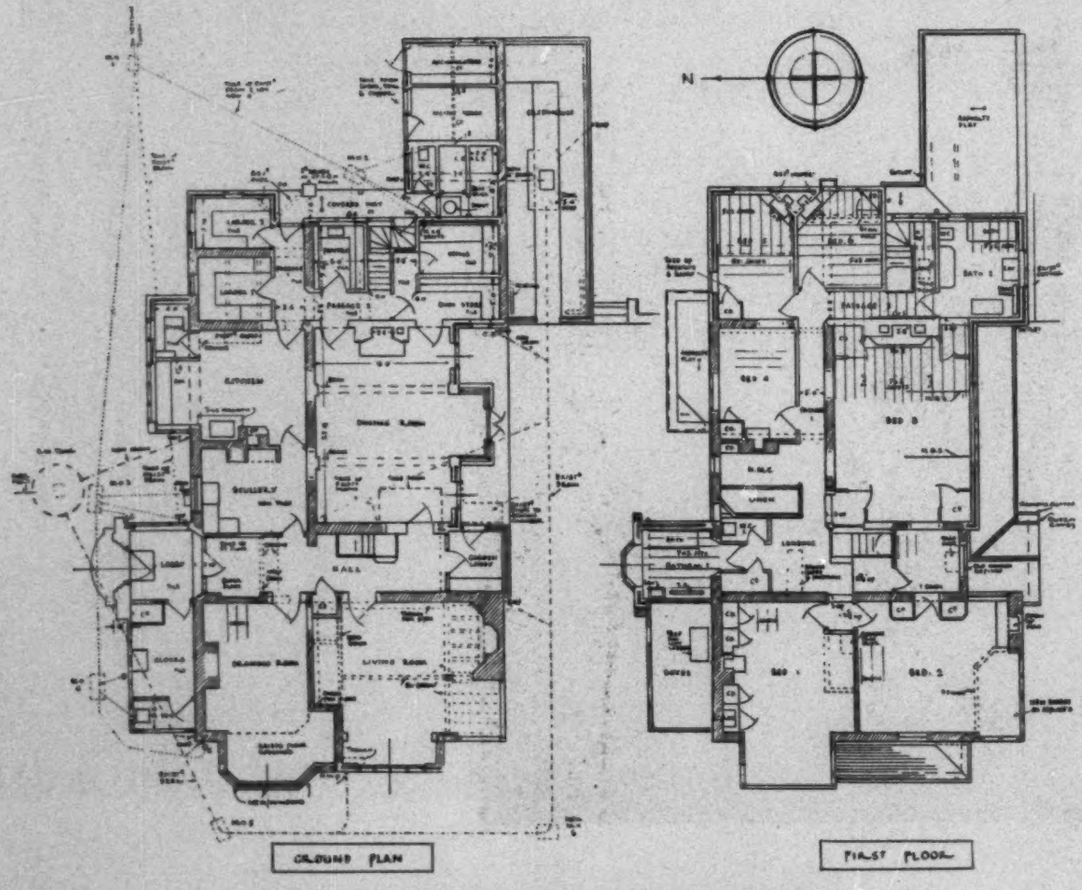
FIRST FLOOR PLAN

A HOUSE AT BARSHAM, SUFFOLK. MR. STANLEY J. WEARING, F.R.I.B.A., Architect.

(See page 649.)



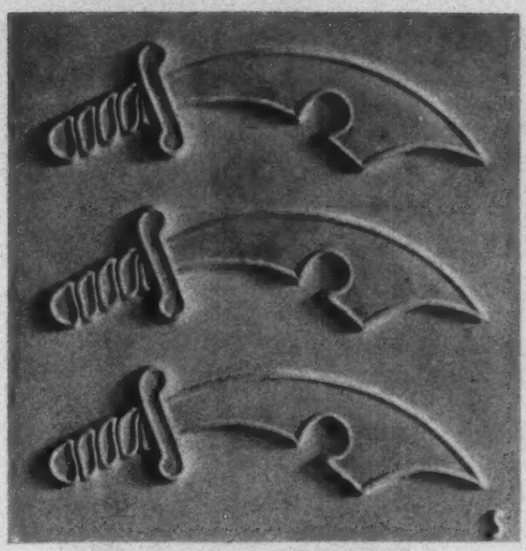
ENTRANCE FROM GARDEN.

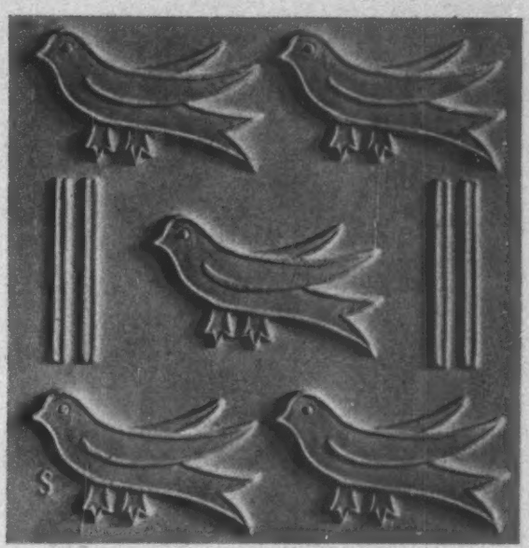


ALTERATIONS TO "HEATH HOUSE," ROUGHTON, NORFOLK.

MR. STANLEY J. WEARING, F.R.I.B.A., Architect.

(See page 649.)

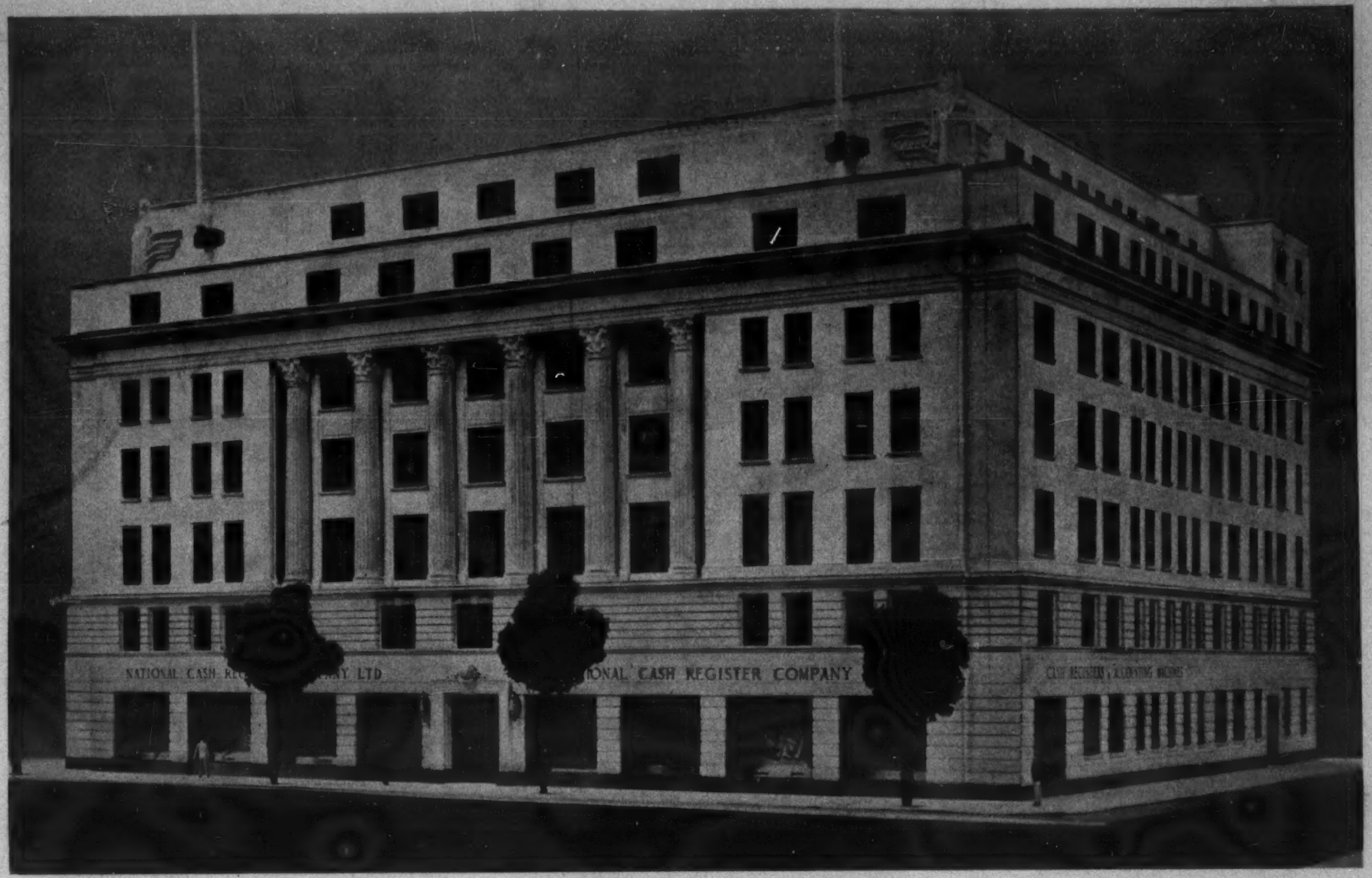




DECORATIVE TILES FOR THE WALLS OF RECONSTRUCTED UNDERGROUND STATIONS.

DESIGNED BY MR. HAROLD STABLER.

(See page 649.)

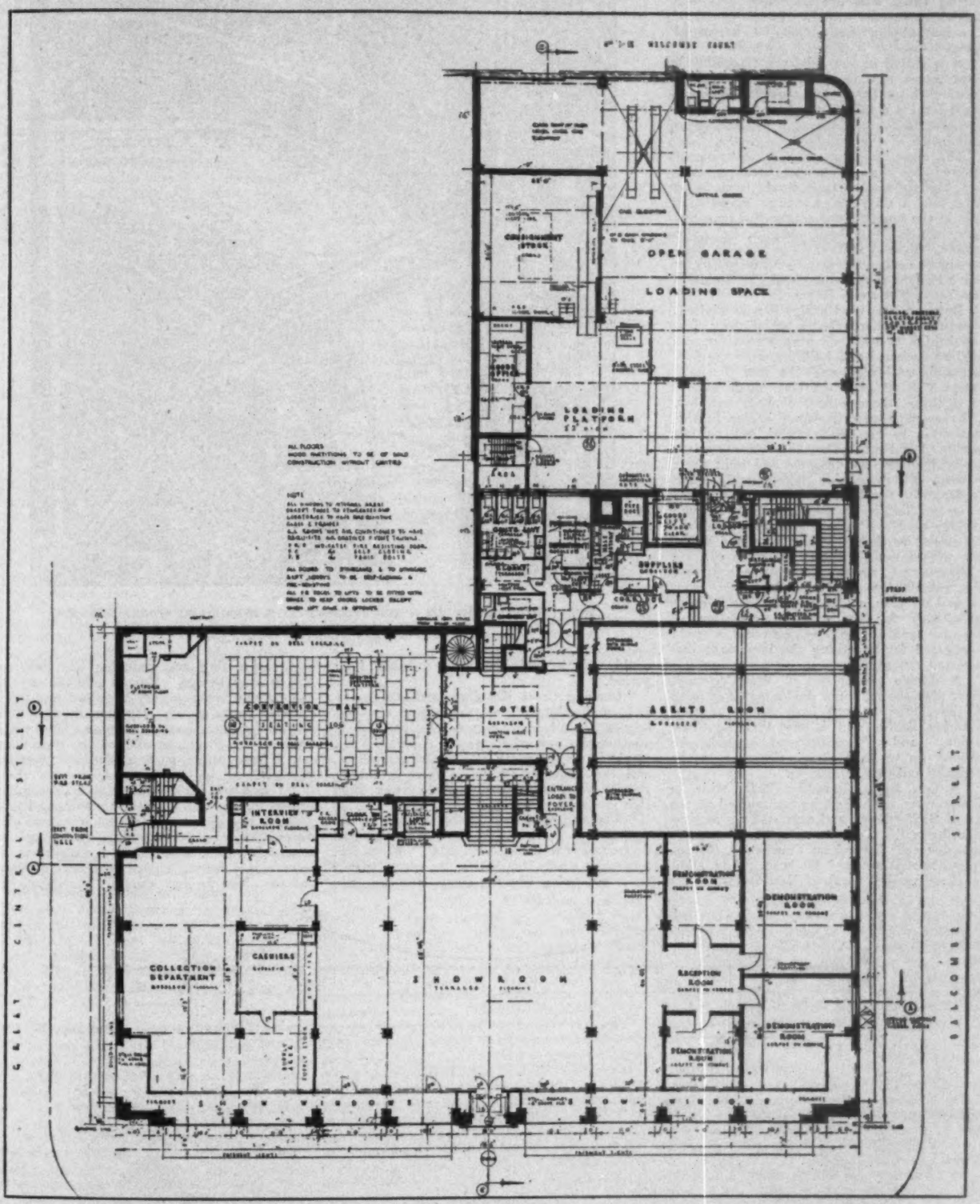


From a Model by John B. Thorp.

"NATIONAL CASH REGISTER HOUSE," MARYLEBONE ROAD, N.W.

MESSRS. J. STANLEY BEARD and BENNETT, Architects.

(See page 649.)



"NATIONAL CASH REGISTER HOUSE," MARYLEBONE ROAD, N.W.

MESSRS. J. STANLEY BEARD and BENNETT, Architects

(See page 649.)

CHARING CROSS BRIDGE AND APPROACH ROADS

A REVISED SCHEME.

Mr. John Murray, F.R.I.B.A., F.S.I., has issued a revised scheme for a new bridge at Charing Cross and the necessary approach roads in connection with it. In the course of an accompanying description he writes as follows :—

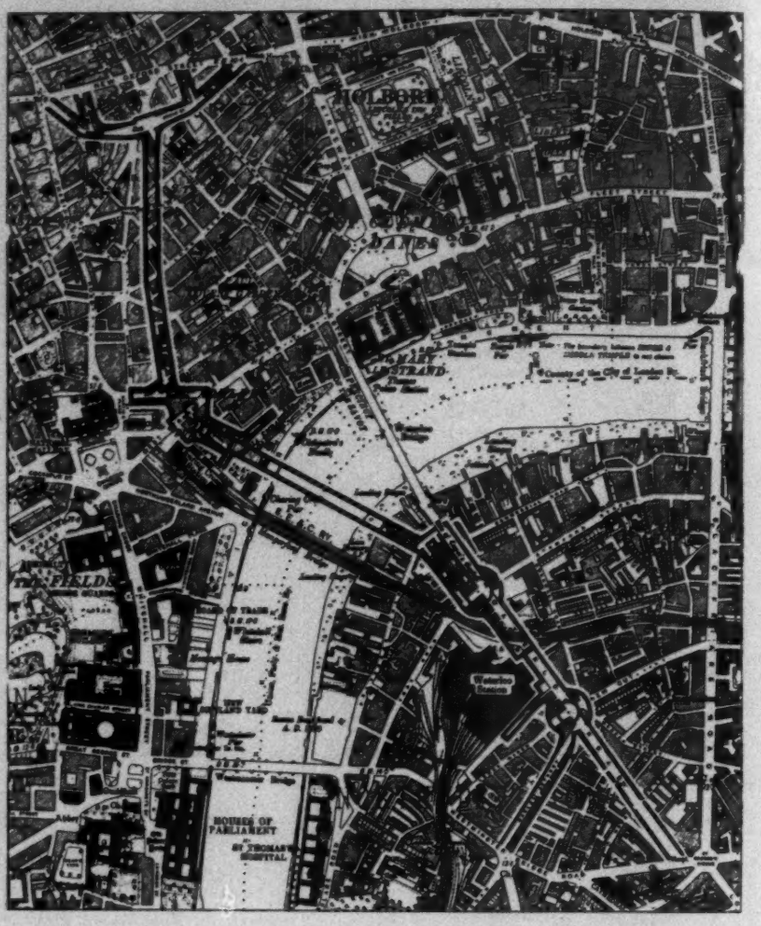
"It is stated in the Advisory Committee's recent report that the type of a new bridge is excluded by them, but surely the design should largely dominate the best location and alignment for the bridge and be the key to the solution of the problem.

"The practicability of a tunnel is not favoured by the Committee because, they state, the approaches to it would have to be about half a mile long, but no mention is made in the report about approaches by spiral roads which, I submit, would be quite possible. More road tunnels in London, however, must come some day, as exemplified by their adoption to solve the traffic problems in New York, Paris and Rome.

"But as a new road bridge is now advised, I venture to submit that a satisfactory five-span bridge to meet all proper requirements could be designed and built between the five-span railway bridge and the new five-span Waterloo Bridge, and the river traffic should not, I think, thereby be too much impeded. If, however, a new five-span bridge in this location is to be finally ruled out as impossible, I submit that a three-span suspension bridge could be designed and built there to meet all reasonable requirements quite satisfactorily, and by it the river traffic would not be impeded in the slightest degree. Such a bridge could be built in line with Buckingham-street, as shown by my plan and elevation, with a roundabout in the same position at Agar-street, as the Committee proposes. This roundabout need not be quite symmetrical on plan, and I submit that is quite unnecessary for the proper circulation of vehicular traffic. Good sites around it could be allotted for rehousing the important dispossessed tenants.

"A double roundabout at Waterloo-road, as my plan shows, could deal adequately with all the traffic to and from both the new Waterloo Bridge and a new Charing Cross Bridge, and Waterloo-road could be widened up to St. George's-circus or to the Elephant and Castle later on.

"A new approach road, 100 ft. wide in Westminster, could best be constructed on the line of Bedfordbury and extended up to New Oxford-street, thus tapping traffic from Oxford-street, Tottenham Court-road, Gower-street, Hart-street and Holborn. Any additional approaches north of New Oxford-street could well be deferred until a much later period.

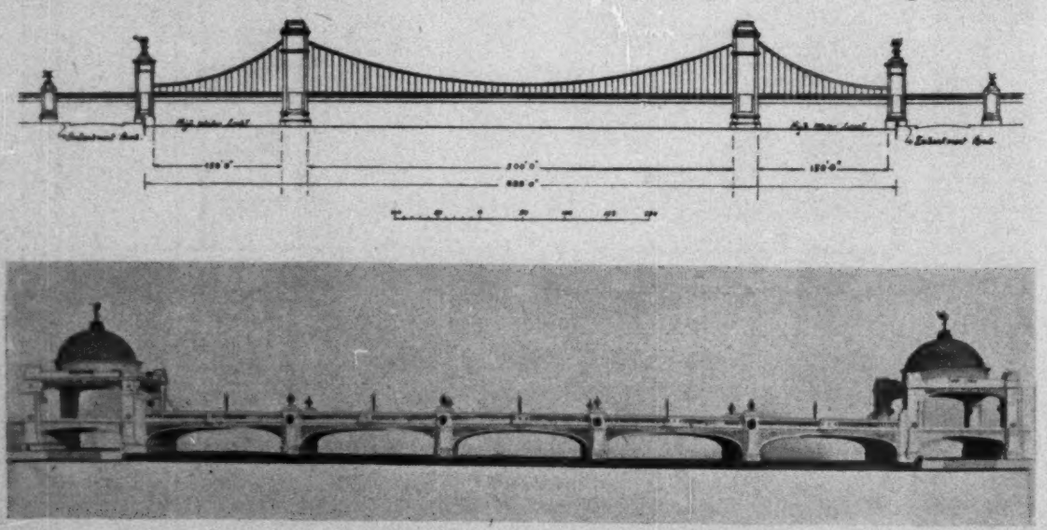


KEY PLAN OF SCHEME FOR A NEW CHARING CROSS BRIDGE AND APPROACH ROADS.
BY MR. JOHN MURRAY, F.R.I.B.A., F.S.I.

"Charing Cross Hospital needs to be rebuilt and enlarged, and the key to the best approach road is to remove the hospital to another site somewhere near. A suitable site would be on the north side of Chandos-street, and the Peabody Dwellings there could be rebuilt on another site a little away from this central location.

"The approach road in this location would not disturb or demolish any very important properties except the hospital. It would, however, surely be better to spend money upon improving Charing Cross Hospital than upon rebuilding and reducing the width of the railway bridge. By not interfering with the railway bridge a very large sum and much time would be saved. My plan shows a good site where the railway station and hotel could be built on the south side of the river later on, if and when such a decision becomes possible.

"I transmit for consideration a photograph of my design for a five-span bridge, also a plan, a key plan and a sketch elevation of a three-span suspension bridge including the approach roads, which I now suggest as an alternative, having regard to recent developments. The bridge should, I suggest, be



ALTERNATIVE DESIGNS FOR BRIDGE.

120 ft. wide to take eight lines of traffic or narrower to take six lines if the authorities should so determine. The two end spans of the bridge, I suggest, would be 150 ft. and the centre span 500 ft., which would provide a very extensive waterway. The two central towers built in the river and the end pylons would be of modest height and not in any way obstruct deleteriously the views up and down the river. The materials that I propose for the construction are steel supported on two central towers, and two end pylons built with the new shock-concrete, which has a smooth surface and is as hard as granite.

"The covering of part of Temple Gardens by the bridge approach road would not be any real detriment for the public, because although some of the open garden ground would be removed, the central part covered could be planned as a very useful, much-needed and attractive site for a refreshment room, an open café, seats for resting (especially during inclement weather), a fountain, badminton courts, etc. Illumination by daylight electric lights would produce a good daylight effect under the approach road.

"The cost of this whole scheme would be very much less than the scheme visualised by the Advisory Committee."

ILLUSTRATIONS

PLATES

Extension of Business Premises, Baker-street, W.

The extension to the headquarters of Messrs. Marks and Spencer, Ltd., which has lately been completed in Baker-street, is of interest as an example of street architecture showing classical influence, but having a freshness and individuality of expression and much refinement of detail. The building is steel framed, with a stone front, and internally decorative materials have been effectively employed, notably travertine in the entrance hall, and oak and walnut panelling in the directors' rooms, and plywood linings in the upper passages. The architects are Messrs. Robert Lutyens and W. A. Lewis and Partners.

The general contractors were Messrs. Bovis, Ltd., and the following were also associated with the work: Higgins and Cattle, Ltd., electric light fittings; William Mallinson and Sons, Ltd., English oak panelling, etc.; Anselm Odling and Sons, Ltd., marble work; Paul Guien, silver bronze and tungum hall lantern; G.V.D. Illuminators, Ltd., lighting; W. J. Furse and Co. (London), Ltd., electrical installation; South-Western Stone Co., Ltd., Portland stone; G. Jackson and Sons, Ltd., fibrous plasterwork; Norris Warming Co., Ltd., heating installation; Cork Insulation Co., Ltd., "Eldorado" cork tile flooring; Waygood-Otis, Ltd., lifts and escalators.

House at Great Missenden, Bucks.

This small house stands on an elevated site facing south, with magnificent views across and up the Chiltern valley on the right. It has a garage detached from the house. Messrs. Wright Bros. were the contractors, and the architect is Mr. George J. Skipper, F.R.I.B.A.

Estate Development, Shepperton-on-Thames.

We publish this week the drawings of the first group of shops allocated to be built on the Lindsay Manor Farm Estate, Shepperton-on-Thames. Work on houses, drainage and roads has been started. The architect, Mr. George J. Skipper, F.R.I.B.A., does not propose to depart from the picturesque quality of the work in the old village, with its church, vicarage, and two old inns (now hotels) grouped round the little market square. The War Close and charming stretch of meadowland has associations with Boadicea. Sir Joseph Paxton actually laid out this estate, and, no doubt, planted the trees which are so pleasant a feature of the estate. The Chertsey arterial road crosses the estate on the west side.

Messrs. Barton and Co., of Hart-street, Bloomsbury, W.C., are the owners and builders.

A Farmhouse at Wickmere, Norfolk.

In the erection of this farmhouse on Mr. C. Mott-Radclyffe's estate, the ruins of a building were pulled down and the old facing bricks cleaned and re-used for dressings, the remainder of walls being cement rendered and cream washed, and the roofs covered with red pantiles. The wash-house and dairy, with lean-to roofs at the back, make a screen for the yard and give the house a satisfactory appearance in any position, which was a point to consider in view of its exposed position on all sides. The cost was £860. The contractors were Messrs. Blyth and Son, of Foulsham, Norfolk.

Mr. Stanley J. Wearing, F.R.I.B.A., is the architect.

Alterations to a House in Norwich.

The alterations to this house, in Christ Church-road, Norwich, were for Mr. S. H. L. Moyle. A considerable amount of remodelling inside was involved, and the entire refronting of what was an ordinary semi-detached villa. The photo shows on the side the type of front that existed before the alterations. Small Dutch bricks were used of varying brownish colours, with pink coloured Dutch bricks round the windows and to string courses. The parapet wall has a string course made up with ridge tiles and cut flat tiles in wide mortar joints. As a number of the Dutch bricks were left over, these were used up in forming a sunk garden, with lily pond and the pedestal for figure, also a table by the seat in the background.

The staircase was carried out in oak with a plywood balustrade, being entirely turned round in replanning. On either side of the front door, which is deeply recessed on the outside, advantage was taken of the spaces to get mirrored niches on the inside, lit from concealed points above.

The dining-room has been panelled out with Australian walnut, wax polished to a flat finish. The recessed niche over the fireplace, which has Chinese tiles around, was mirrored out with pink tinted glass. The builders were Messrs. R. G. Carter, Ltd., of Drayton.

Mr. Stanley J. Wearing, F.R.I.B.A., is the architect.

A House at Thetford.

In this house, for Mrs. H. Bunn, the materials used were red facing bricks with lighter ones picked out for window surrounds, and a red pantile roof. The front door is painted apple green, with cream-coloured surround and hood. The builders were Messrs. Hogg and Son, of Coney Weston, the cost being £770.

Mr. Stanley J. Wearing, F.R.I.B.A., is the architect.

A House at Barsham.

This house, for Mr. C. J. Mather, is about two miles from Beccles, in Suffolk. The materials used are mottled red facing bricks with red pantile roofs, and standard steel casements in wood frames. An important feature in the planning was the sitting-room; and the location of the fireplace, although somewhat unusual, proves to be satisfactory in use, and an interesting room is the result. The working kitchen, with its serving hatch and double doors to the dining-room, is fitted out with cupboards from floor to ceiling, having flush doors, apple green being the colour scheme in this room. Electric current is generated in the outbuildings adjoining. The contractors were Messrs. R. G. Carter, Ltd., of Drayton, Norwich.

Mr. Stanley J. Wearing, F.R.I.B.A., is the architect.

A House at Roughton, Norfolk.

Considerable alterations were here made, for Mr. Walter Lloyd, to an old house, involving completely turning round the main entrance and approach, building a new dining-room and bedroom over, also a new wing. Generally the walls were cemented and cream colour-washed, but the entrance was carried out in mottled red facings and the surround to the oak door done with flat tiles with wide joints. This treatment was echoed inside in the dining-room fireplace, and special treatment given to the bedroom over, with coved ceiling, each corner being panelled for cupboards, also the entrance and way to private bathroom. Old oak beams were used in the dining-room and the lounge, and some panelling was used for the last-named room. Messrs. Bullen and Son, Ltd., of Cromer, were the contractors.

Mr. Stanley J. Wearing, F.R.I.B.A., is the architect.

Decorative Tiles.

We illustrate six decorative tiles designed by Mr. Harold Stabler for the walls of reconstructed Underground stations. They are symbolic of London and the Home Counties, and will be used to introduce a note of interest into the monotony of the ordinary plain tiling.

"National Cash Register House," N.W.

These premises are situated on the northern side of Marylebone-road, almost opposite the Marylebone Town Hall, and occupy a site with three street fronts. The building is designed with seven floors and a basement, and the whole will be occupied by the National Cash Register Co., Ltd. The external treatment of the building is on classical lines, and faced with Portland and reconstructed Portland stone. The building is essentially modern in its equipment, and is air-conditioned throughout, whilst the lifts are completely automatic. The main showroom, which extends in height through two floors, has a length of 64 ft. 6 in. and a width of 45 ft. 5½ in., and is panelled in British walnut. There is also a showroom for accounting machines on the second floor, panelled in a similar manner, as are also the principal executive offices throughout the building.

Messrs. J. Stanley Beard and Bennett are the architects.

OBITUARY

John Hatchard-Smith, F.R.I.B.A.

We have to record the death of Mr. John Hatchard-Smith, F.R.I.B.A., at the age of 83. A memoir will appear in our next issue.

Thomas Rayne, L.R.I.B.A.

We regret to record the death of Mr. Thomas Vincent Rayne, of Newcastle-upon-Tyne, who was for four years architect to the Northumberland County Council, and up to the time of his death was in practice in the city. Mr. Rayne, who was 65, entered his profession in 1886. From 1898 until 1904 he was chief assistant to Mr. B. F. Simpson. Then he went into partnership in the firm of Messrs. Simpson, Lawson and Rayne until 1909. He then took up practice on his own account until the time of his death, with the exception of a break of four years, from 1915 to 1919, when he was architect to the Northumberland County Council. Among the buildings designed by him were the Bigg Market Toffee Works, and much domestic work in the North country.

"Rural Industries."

Articles written specifically for craftsmen are again published in the autumn number of "Rural Industries," the organ of the Rural Industries Bureau. The tenth of the series on oxy-acetylene welding deals with the application of wear-resisting materials, and an illustrated article on ornamental ironwork gives technical information on the making of wavy bars and tools.

This issue also includes advice on glaze experiments for potters; the results of a welding competition held at the Royal Show; a technical service for welders, and particulars of a marketing experiment now being conducted in Derbyshire.

The magazine is published at 6, Bayley-street, London, W.C.1, price 1s. per annum.

ART SCHOOLS IN THE MACHINE AGE

ADDRESS TO THE CROYDON SCHOOL OF ART AND CRAFTS

On Wednesday evening, September 23, at the Adult School, Croydon, the prizes were distributed to the students of the Croydon School of Art and Crafts. Alderman Major F. W. Rees L.R.I.B.A., presided, and Mr. Eric Gill delivered an address.

Mr. Gill said that the Great Exhibition of 1851 was the first attempt of manufacturers to advertise internationally, and one of its results was the recognition by the upper classes of the fact that the introduction of the factory system and the development of machine production had resulted in a degradation of the design of objects in common use. The people who controlled the factories, being only interested in making money, had only one idea, to produce larger and larger quantities of those things to which people were used. They were not sufficiently intelligent to develop or invent new kinds of things suitable to the new methods of machine production, but produced simply machine-made copies of hand-made things, so that the first intention of the new art schools was to improve commercial design; and in order that this might be done they could think of nothing better than the endowment of museums in which to place examples of the works made by men before machinery was introduced. They could not see that the use of machinery necessitated a new kind of design, and thought nothing was wrong except that factory owners were copying inferior models; so they filled the museums with ancient objects, set students to work studying and copying these, and invented a system of examinations by which the students might gain diplomas and so win appointments as designers in the factories.

Bases of Good Design.

The basing of industrial design upon a study of ancient examples was bound to be a failure. The bases of good design were (*a*) a knowledge of the purpose of the thing to be made, (*b*) the use of good materials, and the understanding of their natures and possibilities, (*c*) good tools and technical training, and (*d*) a lively imagination in the workman, so that he might see clearly in his mind the form of the thing to be made. But the study of ancient examples corrupted all these bases because (1) modern purposes differed from old ones so that old models were very little use. (2) The knowledge of materials must be obtained at first hand; (3) the use of tools could only be gained by actually using them, and, above all, (4) the imagination was corrupted because the mind was filled with other people's ideas.

The industrial system was generally put before us with enthusiasm. We were invited to admire the exhibitions of its power, *e.g.*, railway trains, telephones, wireless telegraphy, aeroplanes, machine guns, tanks, battleships and bombs, and also the countless conveniences it added to life, such as cars, motor-buses, electric light and typewriters. All these were produced by mechanical means, and to a very great extent the hard physical labour of our ancestors had been done away with. In 1800 practically all labour was physical labour of men or animals, but now everybody looked forward to the time when all the necessaries of life would be made by machinery, and it was hoped that when this ideal was realised we should be free for higher things. The aim which industrialism followed with enthusiasm was the complete mechanisation of all necessary industries, so that we might have leisure to pursue sports and hobbies freely. This ideal was called the leisure state, and to attain it not only was machinery being improved day by day, but endeavours were being made to train us to enjoy leisure properly.

Design for Machine-made Things.

When we considered the nature of factory employment, the leisure state was an overwhelming temptation—nobody could be expected to regard working on the belt system, for instance, as a vocation to which he was called by God. In such a system ornament was ruled out, because ornament depended on liveliness and variety for the pleasure it gave. But the business of machines was to make things in quantity, not in variety; not to do things one by one and all different, but to do them in large quantities and all the same. Obviously, good design for machine-made things must rely on plainness—the thing must be a good shape in itself, and this good shape must depend primarily upon the use of the thing. Therefore, the whole idea of studying hand-made things in museums was ridiculous and examinations in styles and ornament were worse than useless. The test of good work was no long quality, but saleability, and saleability depended upon the ability of the advertiser. Such a world was quite different from that which people who regarded their work as a vocation would like to have. But such people were a very small minority to-day. They had become special people. We called them artists and employed them to make things to amuse us in our leisure. In former times it had been true to say, "the artist is not a special kind of man, but every man is a special kind of artist"; but to-day the reverse of this was the case, and the ordinary man was a machine-minder. He knew how to make the machine go, but he knew very little about the thing he was making. Often he did not even know what it was. People still wanted ornament, and the factory people supplied it in various forms, but it was happily becoming rarer. The best machine-made things were the plainest, and those most suitable for their purpose; therefore, the art school had nothing to give to industrialism. What it had given was a bad thing, because it made engineers think machines ugly and needing ornamentation; such things could be beautiful, and it led to the covering of iron buildings with imitation Greek and Roman architecture.

Beauty.

Beauty was not simply an adornment; it was the result of making things the right way, and the business of art was not to make things beautiful, but to make them according to right reason. There was indeed no need to talk about beauty, still less to put it on a pedestal and worship it as something above the common things of men; and it was completely and utterly wrong to think that capitalists and industrialists did not care about beauty. On the contrary, they gave it an honour unheard of in mediæval England, for they endowed picture galleries, museums and art schools, while prominent painters, sculptors, architects and poets were made lords and knights. There was no lack of honour to beauty; the evil was that we thought of it not as an ordinary thing to be found everywhere, but as a special thing made by special people, and found only in special places. The remedy was not in talking more about beauty, but in talking less, and we should especially remember that beauty had nothing to do with art or art schools.

Place of the Art School.

What was the place of the art school? Had it any place in our world? The art school had a very definite and useful place. The art school was what biologists, monks and revolutionaries called a cell. A cell was a living unit in a living body. A body was built up of living cells. Each cell had its individual life, and living cells multiplied and made a body. If a cell was strong and placed in a weak or decaying environment it would feed on what was good in its surroundings, growing and spreading, and eventually permeating those surroundings and transforming them into a new body. In early Christian times the monasteries had been like that, gradually destroying the barbarism surrounding them until a garden grew in the wilderness; those monasteries had been the cells of a new civilisation. But he would not now describe the rise and decay of the mediæval culture, nor the rise and triumph of industrialism, nor the decay and confusion this had wrought. He would put before his audience a cheerful thought, an inspiring idea—namely, that the art school was a cell. The Communists talked about Communist cells, and an art school was a revolutionary school in exactly the same way. What was the revolution to which art schools were committed? Nothing less than the complete reversal of our existing industrialism.

The diabolical direction in which industrialism was going, and on which it actually prided itself, was the supersession of human labour by the machine. If this ideal were realised, human labour would be only for hobbies, while the necessaries of life would be made by machines. But the things men needed were the things they loved. During countless centuries men and women had expended all their care and skill on such things as the farm and the kitchen, on clothes, furniture, pottery, metal and the whole business of building, from cottages to cathedrals. It was said that if all such work were done by machinery we should be released for higher things, but for the majority of men and women there were no higher things. If, as St. James said, pure religion and undefiled was to visit the fatherless and widows in their affliction, and to keep ourselves unspotted from the world, so we might also say that true art was to make well what needed making for love of God and the service of our fellow men and women, and to keep ourselves unspotted from the world of flattery and vanity, from personal display, exhibitions, art galleries, art critics and all art nonsense. That would be a revolution indeed, because it would be a reversal of all our present ways of production, of all our present ideas and ideals. It would be production for use rather than for sale, for service rather than for worldly success and fame. As things were to-day, the art school was the only place where such a revolution could be fostered. It was the only place left where men and women, boys and girls, were taught to be responsible workmen, the only place where people actually designed what they made and made what they designed. In the future the work done in the art schools of to-day would bear its fruit.

RETIREMENT OF THE B.C.G.A. CHAIRMAN

We learn that Sir Francis Goodenough is to retire this year from the post of Executive Chairman of the British Commercial Gas Association, which he has held since that body was set up in 1911 to represent the commercial interests of the whole British gas industry. During those 25 years the quantity of gas sold per year has increased from 205,000 million cubic feet to 332,000 million cubic feet, and the number of consumers from 7,000,000 to 11,000,000.

The strongest personal interest of Sir Francis outside the gas industry was, and still is, in educational questions. He formulated general ideas on education for business, and became the leader of those who were pressing for an improvement in the national system of commercial training in the light of new economic conditions. In 1928, when the Government announced its Committee on Education for Salesmanship, he was appointed chairman. The Committee included some of the foremost figures in British industry and commerce. It published three detailed reports between 1929 and 1931, and its recommendations have had considerable influence on the development of commercial education. In 1930 its chairman was knighted as Sir Francis Goodenough. He had been created a C.B.E. in 1926. Sir Francis will continue to act as a director and vice-chairman of the South-Western Gas and Water Corporation.

THE BUILDING EXHIBITION

SOME CONCLUDING NOTES

VISITS BY SOCIETIES

NATIONAL FEDERATION OF CLAY INDUSTRIES.

A meeting of the National Federation of Clay Industries was held on Wednesday, September 23, at the Building Exhibition, and afterwards the members were entertained to luncheon by the directors of the exhibition, Mr. H. Greville Montgomery acting as host.

The President of the Federation (Mr. Herbert Wragg) proposed the health of Mr. Montgomery, saying he did not know during how many years they had enjoyed Mr. Montgomery's hospitality, but it was at any rate ever since the war. They were deeply indebted to him for great work done in connection with the brick industry, and more especially for the bi-annual exhibition. Looking around, they realised what a tremendous amount of organisation and time that required. The speaker concluded by expressing the hope that such functions as that would continue for many years.

Mr. Horace Boot supported the toast.

Mr. Montgomery, in reply, said he was suffering from an incurable disease called Anno Domini, and could not say more than that he hoped to be present in two, four, six and eight years' time. It was now fifty years since he had become connected with the brickmaking industry. He had been ambitious in those days, and thought it would be a wonderful thing if he could get brickmakers to come together. He had started off on a little campaign of his own, but had no success at the time. At that time the brick trade was an arid wilderness, but he had lived to see it a flowery plain.

SOCIETY OF ESTATE CLERKS OF WORKS.

On Wednesday, September 23, the exhibition was visited by members of the Society of Estate Clerks of Works, who were afterwards entertained to tea by the directors, Mr. H. G. Montgomery acting as host.

Mr. N. Pedder (President), proposing a vote of thanks to Mr. Montgomery, said he thought that was the best gathering since he first attended the exhibition.

Mr. T. W. Potter, seconding the motion, said the members of the Society were scattered all over the country—there were present on that occasion members from at least a dozen counties, and very few living in London itself—and by granting them the use of that room Mr. Montgomery had enabled them to have that gathering, which was one of the biggest and most successful they had had for a long time. As nowadays we heard so much about housing, he (the speaker) would like to say that Estate Clerks of Works had done a great deal in that direction. In his own experience he had been on the estate of a nobleman where, in the course of events, a block of sixteen back-to-back cottages became due for repair. Originally these had been built for a colliery company, which had either failed or worked the seam out, so that the cottages came back to the landlord. When told to put them into repair (i.e., have them painted, and so on) he had suggested that they were not healthy as they were, and that it would be much better if the sixteen were made into eight. He had obtained the consent of his employer, and the sixteen were converted into eight accordingly. Many clerks of works had similar opportunities to improve the housing of the labouring classes, though now there was a Town and Country Planning Act that opportunity was more or less taken out of their hands.

The vote of thanks was unanimously accorded, and in thanking the Society, Mr. day, September 24, when 170 members at- Montgomery said the building trade had played some part in slum clearance, and those who saw the Housing Exhibit in the gallery would know what he meant. When the King had visited the exhibition he spent a good deal of time in the housing section. It was the thing that interested him most, and he had been particularly interested in the bath in the old people's flat, which allowed the bather to sit up while bathing.

THE KERNER-GREENWOOD STAND.

LONDON MASTER BUILDERS' ASSOCIATION.

Members of this Association visited the Exhibition on Monday afternoon, when they were received by the President (Mr. Eric Burt, F.I.O.B.), and subsequently entertained to tea in the Pillar Hall.

SOUTHERN COUNTIES' FEDERATION.

The Southern Counties' Federation of Building Trades Employers made its official visit to the Building Exhibition on Thurs- tended, and were entertained to tea by the management. The visit proved to be most successful and enjoyable, and the Federation's thanks were expressed by the senior vice-president (Mr. F. Leslie Wallis, M.I.O.B.) to Mr. H. G. Montgomery. The council had earlier in the day been entertained to luncheon by Mr. H. Greville Montgomery.

STAND OF THE CANADIAN GOVERNMENT EXHIBITION COMMISSION. (See page 652.)

THE VENESTA STAND. MR. R. D. RUSSELL, Architect.

THE SILICATE PAINT COMPANY'S STAND.

THE KURT ERLACH STAND.

EXHIBITION NOTES

L.C.C. SCHOOL OF BUILDING, BRIXTON.

The School of Building provided a fairly comprehensive exhibit at the Building Exhibition, showing not only craftwork—which is always the most noticeable—but giving information as to the wider activities of the school in connection with applied science and higher vocational training and technical education for the associated professions.

Large charts were included, drawing attention to the departments of the school and their respective functions, *e.g.* :—

The Junior Day School, giving full-time training for boys of 13+ who wish to enter the industry in any capacity. The course is educationally broad but with a vocational basis.

The Senior Day School, for youths of 16+ who desire higher vocational training for the industry or for any related profession, such as architecture, structural engineering, surveying or sanitary engineering.

The Evening School, which provides a wide field for study, offering full five-year courses in general building, building administration, architecture, building and quantity surveying, structural engineering, reinforced concrete engineering and sanitary engineering. On the craft side of the school, four-year courses are offered in brickwork, masonry, carpentry and joinery, wood machinists' work, plumbing, plastering and painting and decorating. In these craft courses the first two years give preparation for the intermediate examination and the last two years give preparation for the final examination of the City and Guilds of London Institute. There are adequate workshop facilities for all these trades, with modern machine equipment for woodwork and masonry.

The school offers special facilities for study in preparation for all the examinations of the professional institutions concerned with building, architecture, surveying, structural engineering and sanitary engineering, and for examinations held by the Worshipful Company of Carpenters. New laboratories have been provided for chemistry, physics and mechanics, so that all phases of building science may receive due and adequate attention.

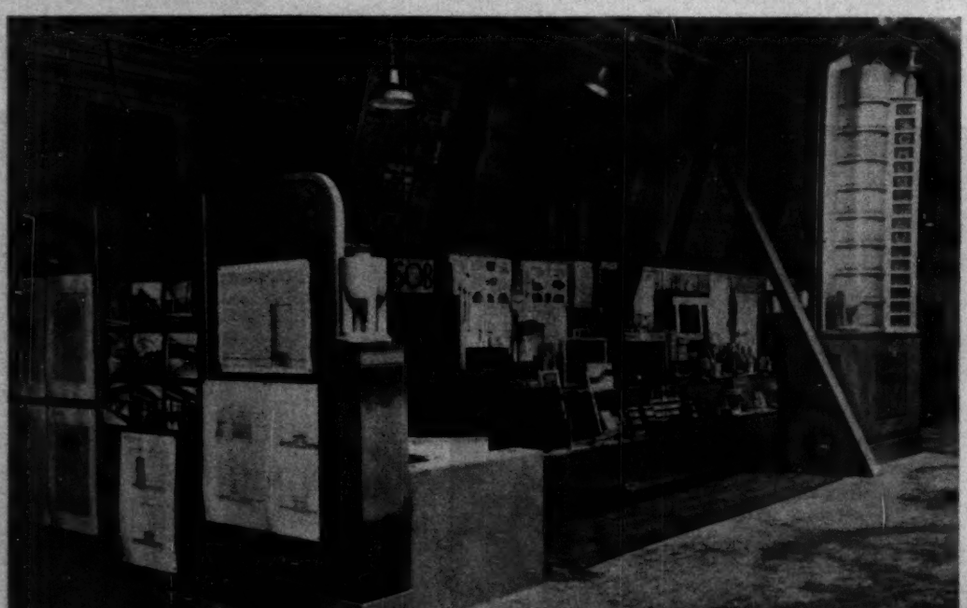
A special feature of the evening classes is provided in the subject of interior decoration, which is linked with the departments of architecture and painting and decorating.

The Principal of the school is prepared to advise all inquirers and to provide facilities for visiting the school at any time.

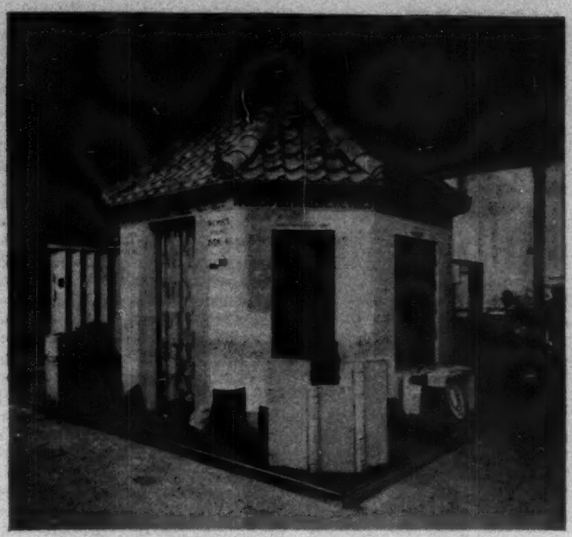
EASTERN CANADIAN TIMBERS.

The Timber Commission for Eastern Canada showed a comprehensive display of Eastern Canadian timbers at the Building Trades Exhibition at Olympia. Prominence was given to a skeleton roof of spruce, the most important commercial softwood of the provinces of Quebec, New Brunswick and Nova Scotia, and the second most important softwood in the Dominion of Canada. Its availability in sizes such as are required in the United Kingdom, its strength, ease of nailing, and workability are indicative of its suitability for carcassing. Of those architects and builders who called at the stand many expressed surprise that this timber is not specified more for house construction in London and the South of England, where red deal is so popular. This neglect of spruce, one of the most reasonably priced timbers on the market, has not been inspired by dislike of the wood. It is simply that spruce has as yet not been used extensively in this area, and many of those who might specify it are unaware of its good qualities. It is likely, therefore, that the exhibit at Olympia has contributed towards the establishment of spruce in the South of England.

Canadian silky wood panelling was also prominently displayed. This panelling, which had been finished naturally and with a grey



THE L.C.C. SCHOOL OF BUILDING (BRIXTON) DISPLAY.



STAND OF THE EVERLASTING TILE COMPANY, LTD.

stain, had been much admired, and several architects, we learn, have signified their intention to use this wood. Silky wood is a selective grade of Canadian yellow birch, and is characterised by a wavy, curly grain and a satiny lustre which can be very effectively accentuated in panelling. When H.M. the King visited this stand recently he expressed pleasure that exports of timber from Canada to the United Kingdom were increasing, and no doubt Canada will continue to supply more of the requirements of this market.

Craftsmanship in Lead.

Among the attractions of the Building Exhibition none were more popular than the displays of craftsmanship by skilled workers at some of the stands. At the Lead Industries Development Council stand, several times a day a lead-burning demonstration drew an interested audience—a crowd in which youth, sceptical of the value of old-fashioned ways, jostled elbows with experienced workers in lead, who nodded admiringly at their fellow-craftsman's skill in fashioning and burning lead.

To the public, in the face of all the mass-produced materials around them, this craft at first seemed something remote from modernity—something which time and new tools and practice had surely rendered obsolete. It surprised them to find that this very highly skilled operation is an essential branch of modern plumbing practice, though the tradition behind it is centuries old. Even the tools of the craft have been passed on little changed from one generation of plumbers to the next, the chief innovation having been the blow-lamp in place of the small charcoal brazier of former days. Otherwise a modern lead-worker's tools would have been recognisable by lead-craftsmen of the Middle Ages, perhaps even by the Romans themselves. A solder-iron of about 75 years ago, now in the Science Museum, is practically identical with those used to-day, and an old picture of a plumber's workshop of the beginning of last century shows an array of implements to be found in any present-day plumber's bag. Prior to the 18th Century no examples of plumbers' tools are known to exist, but the markings on soldered joints in lead-piping even as early as 1432 show that a similar implement was then used. This is true also of the lead pipes used in building Hampton Court in Tudor times.

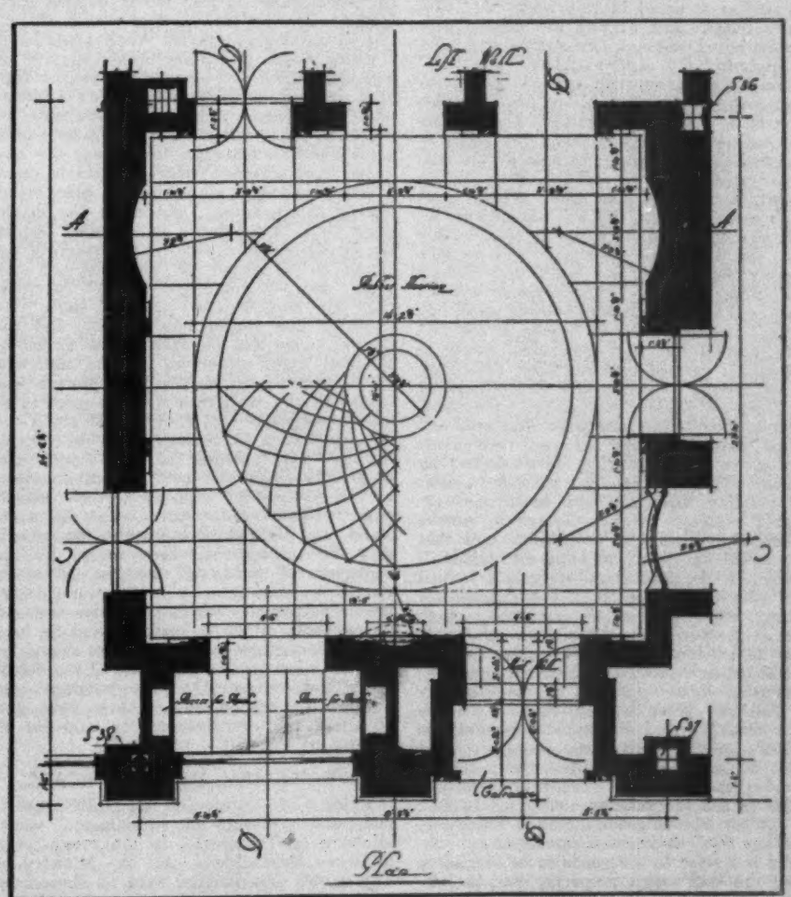
Tools and craftsmanship both are the heritage of the plumber from the distant past. What of the future? The increasing use of lead in present-day building practice is well justified, provided true craftsmen are found to carry on the tradition. Is the present generation of master plumbers training up a sufficient number of skilled lead-craftsmen to succeed them? Well trained youngsters of to-day have no lack of skill, as many fine plumbing and decorative leadwork exhibits from vocational training and technical centres go to prove, but are there enough of them to fill up the ranks of the "old-timers," of whom the plumber who worked at Olympia is so good an example?

Bathroom Suites.

An attractive display of sanitary ware was shown at the exhibition by Messrs. Downham and Co., manufacturers of "Vauxhall" bathroom furnishings. All types of fittings for all types of uses from housing schemes to luxury equipment, were on view. Among the furnishings manufactured by this company are recessed cabinets with frameless mirror and framed mirror doors (one ingenious cabinet having a mirror which is raised by pressing a button, revealing the shelves); surface fixing cabinets; electrically illuminated cabinets for recessing and surface fixing, in modern and other designs; and a wide selection of miscellaneous fittings, such as mirrors and opalite splash backs; wall fittings, bathroom chairs, bins and bath seats; and chromium plated fittings. A speciality is made of colour work, furnishings being accurately matched to sample tiles or shades supplied by customers. The fittings are of a high standard of design and finish, and we suggest that architects obtain a catalogue from 46-47, Auckland-street, London, S.E.11.

A Plans Reproduction Machine.

Particulars have reached us of the "Raidagraf" Reproduction Machine, which has been on view at Pilkington Bros.' stand (Armourplate Section) at the Building Exhibition at Olympia. "Raidagraf" is a new and simplified photo mechanical process for the accurate, rapid and cheap reproduction of specifications, documents, drawings, etc., without the use of a camera or dark-room or the necessity and consequent delay of sending the original out of the office. No technical skill is required to operate "Raidagraf" for all purposes. Samples of the work which we have seen indicate that it is possible to produce exact copies from opaque documents or from originals printed on both sides. Architects or engineers interested can see a demonstration at the Victoria-street showroom of Modern Products (L.C.L.), Ltd.



EXTENSION OF MESSRS. MARKS AND SPENCER'S HEADQUARTERS, BAKER STREET, W.
Plan of Entrance Hall.
MESSRS. ROBERT LUTYENS AND W. A. LEWIS AND PARTNERS, Architects.

(See page 649.)

NATIONAL ROAD TRANSPORT CONFERENCE

At the National Road Transport Conference, held recently at Brighton, papers were read having a direct or indirect interest for the building industry. From these we take the following extracts :—

LEGAL PROBLEMS OF ROAD TRANSPORT.

In the course of a paper on "Some Everyday Legal Problems of the Road Transport Operator," Mr. Ronald McDonald (partner, Messrs. Joynson-Hicks and Co., advisory solicitors to the Commercial Motor Users Association) said having regard to the various Acts of Parliament passed in recent years affecting the use of mechanically-propelled road vehicles and the multitudinous regulations made under these Acts, each of which had the force of an Act of Parliament, owners and users were now surrounded with many problems, and he proposed to deal with a few of them which presented themselves almost daily.

Carrying of Rubbish by Builders' Merchants on "C" Licence Vehicles.

This question was one which was causing very considerable discussion and allowed a considerable amount of unfair and uneconomic competition. Many sand and ballast merchants and builders' merchants only carried for hire and reward builders' plant and building materials from one building site to another. The majority of them also carried what was commonly known as "muck," which amounted to material excavated upon the sites where building was in progress. If the carriage of this material was authorised under the conditions of a limited carriers licence, then no question arose, but the unfair competition occurred in this way. A "B" licence holder had to pay his drivers conciliation board wages, whereas these wages did not apply to "C" licence holders. The "C" licence holder frequently carried this excavated material on his vehicles, his argument being that it was not carriage of goods for hire and reward as it became his property despite the fact he might be paid by the contractor for removing it. He took it to rubbish tips which he might hold under a lease or in which more normally he was allowed to deposit the rubbish upon payment of a certain sum. By this means not only was he able to carry the rubbish at a lower price than a "B" licence holder, but it probably enabled him to sell his own goods at a lower price than a "B" licence holder by reason of the fact that he need not pay such high wages to drivers. It seemed perfectly clear that, with one exception, the carriage of this rubbish by "C" licence holders was illegal. The usual circumstances of the case were that sand and ballast merchants and builders' merchants were given contracts which were one and indivisible to supply their own sand and ballast and building materials and to remove excavated rubbish. If they refused to remove the rubbish, then the probability was that they would not obtain a contract to sell their own goods. In these circumstances, it seemed that even if they removed the rubbish for nothing, some part of the amount paid to them as the purchase price of their own goods must be attributable to the carriage of the rubbish when removing it from the site. This contention would appear to be borne out by the Hackney Wick Stadium case. So far as the contention that the rubbish became the haulier's own property was concerned, this might be so in one instance. Section 2 (4) provided that a "C" licence entitled the holder to use the vehicles authorised thereon for the carriage of goods for or in connection with any trade or business carried on by him. It did not refer to the goods to be carried as being the man's own property, and, in fact, in certain circumstances they need not be his property. If the builders' merchant deposited the rubbish in his own sand pits for the purpose of restoring the level of the land to that existing before he removed the sand, then possibly he was entitled to carry these goods perfectly legally under a "C" licence. If, on the other hand, they were carried to dumps where he paid for the privilege of depositing the rubbish, then it could not be maintained that the goods were for or in connection with his business of a builders' merchant or sand and ballast merchant.

Liability in Respect of Hired Servants.

One would have thought that there would not be much difficulty in deciding whose servant a particular employee was. But in the case of hired servants a very difficult question often presented itself. The question was when was a servant not a servant, and when was a person who was not a servant, a servant? The distinction was drawn between a general and a particular servant. A general servant was one who was usually employed by his master but was hired out on occasions to do work for a third party, and the servant, although he remained the general servant of his employer, became the particular servant of the third party. In these cases, although the employee who was acting as a particular servant might be doing his work negligently and cause damage, it was generally the third party who had to pay, but in such a case it was necessary that the master should have disposed for the time being of the man's services, so that whilst he was doing the work for the third party he was under the superintendence and control of the third party and not the usual employer. A good illustration of this was to be found in the case of Leggatt *v.* Normanton. In that case the plaintiffs, Leggatts, were owners of motor vehicles and haulage contractors and Normantons were builders and contractors. It was the practice for Normantons to hire motor wagons from Leggatts for the day together with a driver, and on the day in question Normantons hired a motor wagon and trailer from Leggatts together with two men who were to be in charge of it. As soon as the men arrived on Normantons' premises they received instructions in regard to their work from Normantons' representatives and remained throughout the day under their orders. They were told to carry a cement mixer on the trailer to a place about five-six miles distant, and when the driver came to a tunnel under an aqueduct he did not get out either to measure the height of the tunnel or the height of the load on the trailer, but proceeded right on, with the result that the load became jammed under the tunnel. The wagon was delayed, and the cement mixer was damaged to the extent of £37 odd. One would, he thought, naturally be inclined to say that as the damage was caused by the negligence of the persons hired out by Leggatts that they should stand the damage, but in an action for the recovery of the hire and charges for detention of the wagon the claim was met by a counterclaim by Normantons for damages to their cement mixer. The county court judge, however, found, and his finding was upheld on appeal, that the accident had been caused by the negligence of the driver and that the driver and his assistant were at the time for the particular purpose for which they were engaged the servants of the defendants, and he held that such negligence on their part should be treated in law as the negligence of the defendants, and consequently gave judgment for Leggatts on the amount of their claim and dismissed the counterclaim for damages to the cement mixer.

EXPERIMENTAL WORK ON ROADS.

Major F. G. Turner, B.Sc., A.M.Inst.C.E. (engineer in charge of experimental work, Ministry of Transport), in the course of a paper on this subject, said the Ministry of Transport's experimental road at Harmondsworth had been selected as representative of experiment on concrete. In pursuance of the powers contained in the Roads Improvement Act, 1925, the Ministry in 1928 and 1929 constructed an experimental road at Harmondsworth, Middlesex. The road was built as a by-pass to a section of the Colnbrook By-pass, and in order to maintain suitable levels was on embankment of an average height of 5 ft. To ensure a uniform foundation throughout the experimental length, ballast (which was available locally at a reasonable cost) was used in its construction, being spread in two layers, the first being well rolled before the second was placed. The embankment and associated surface drainage works were completed in November, 1928, and left undisturbed till the summer of 1929 to effect further settlement and consolidation. Special removable kerbs and fences were provided so that traffic could easily be directed to use the experimental road or the main by-pass at will.

The total length of this road was about 600 yds., of which 450 yds. was on the straight and thus available for experimental purposes. The carriageway was 20 ft. between kerbs, although the by-pass had a 30 ft. carriageway, the reduction in width being made to increase the intensity of traffic and so obtain results in a correspondingly shorter time.

The first set of experiments was directed (1) to determination of the effect of various factors in the design of concrete roads, and (2) to investigating the effect of weather and traffic on the behaviour of concrete road slabs. The concrete throughout was of as uniform quality as was compatible with practical considerations. The coarse aggregate was crushed and washed local ¾ in. graded gravel as commonly used for concrete in the locality: in order to maintain reasonable uniformity of grading the whole of the gravel for the road was supplied from one pit only and from only one part of that pit. Sharp washed sand passing ¼ in. mesh was used. In order to ensure that the correct ratio of water to cement for each slab was obtained, it was necessary to make allowances for moisture contained in the gravel and sand: several methods were tried, but the variations in the stock pile were so great and rapid that it was impracticable to measure the moisture content quickly enough for accurate control to be effected. Since this control was essential if a comparison was to be made between different ratios, it became necessary to dry all gravel and sand and allow them to cool under cover before use. The materials, including water, were proportioned by weight, a mix corresponding to the usual "4 : 2 : 1" (i.e., 4 of gravel to 2 of sand to 1 of cement) by volume being used throughout. The concrete was either 6 in. or 8 in. thick: some slabs were unreinforced, while in others a reinforcement of 4.7 lb. of high tensile steel per sq. yd. was used near the top of the slab, or near the bottom of the slab, or near both top and bottom. The concrete was placed on a layer of clinker which had been rolled to a thickness of 3 in.; in some cases this clinker was saturated with water, in others left dry, and in others was covered with a layer of tough waterproof paper. The water-cement ratios used were such that the concrete was (a) so dry that considerable work was necessary to produce a reasonably good surface; (b) such that a good dense surface was obtained with normal labour in tamping and screeding; and (c) so wet that it tended to flow and was only just stiff enough to retain the camber of the road. The transverse joints were vertical butt joints at 90 deg. to the kerb: the longitudinal joint was tongued and grooved on the 8 in. slabs and rebated on the 6 in. slabs. Standard British Portland cement was used. The other details of construction were in accordance with good practice current in 1929.

The Conclusions Reached.

Some of the conclusions regarding the effect of varying factors in design were :—

What thickness of concrete was required? Slabs 6 in. thick, with double reinforcement, each layer 4.7 lb. per sq. yd. high tensile steel, carried traffic which in 1929 was 12,000 tons per day, and in 1935 was 16,000 tons per day on a carriageway 20 ft. wide quite satisfactorily except that the concrete cracked at the corners of the slabs.

What was the effect of varying the water-cement ratio, and what was the effect of laying concrete on (a) wet clinker; (b) dry

clinker; and (c) waterproof paper? These questions had been associated because the results indicated that they were interdependent. On a dry clinker base the concrete should be wet, on a saturated clinker base or on waterproof paper it should be as dry as was consistent with a good surface finish. The results noted might be to some extent dependent on the fact that the embankment was of ballast and so offered particularly good facilities for the water to drain into it from the clinker. It seemed possible that better results might be obtained by the use of a mix even drier than any used on this road provided adequate consolidation and a satisfactory surface finish could be obtained. It was interesting to note that mechanical tamping or vibration of "dry" concrete mixes was said to have given successful results on the Continent though so far these methods had not been much used in this country.

What was the effect of steel reinforcement? The results indicated that the only advantage of a single layer of steel reinforcement as used on this road was to prevent cracks from widening once they were formed: the use of two layers of reinforcement was a definite advantage in resisting the tendency of the concrete to crack.

What was the effect of having slabs (a) 30 ft. long, (b) 45 ft. long? Unreinforced concrete slabs tended to crack into sections about 15 ft. long. Very few cracks had occurred in the doubly reinforced slabs, and it seemed reasonable to conclude that if suitable reinforcement were provided slabs of greater length than 45 ft. might be laid which would not crack.

What was the effect of surface treatment with silicate of soda? None that could be noted.

Arrangements were made for measuring the changes which took place in the concrete. The measurements which were made included temperatures at the top and bottom of one of the slabs, curling of the slab due to temperature changes, the abrasion of the concrete by traffic, variations in the length of the slab with temperature, and the deflection caused by traffic at the transverse joints.

Having given further details of the tests applied, the lecturer said the road had been discussed at considerable length partly because it was the first experiment undertaken, but even more because of the special measurements and detailed observations that it had been possible to make on a road belonging to the Ministry. The information gained had been a starting point for a number of experiments, notably in Surrey, Gloucester, Lancashire, the West Riding and Cheshire. The success obtained with the 6 in. concrete under severe traffic conditions had encouraged trials to be made of concrete of more economical design than would otherwise have been adopted, using, for instance, local stone instead of more expensive imported stone, leaner mixes, and thinner concrete.

Although the experimental road was, after 6½ years' wear, in a condition to continue carrying traffic for a further indefinite period, the committee were of opinion that from an experimental point of view it had nearly reached the end of its useful life and the near future would probably see the completion of this experiment.

INQUIRY BUREAU

QUESTIONS.

Estimators and Insurance.

SIR,—It is customary for bills of quantities to contain an item, "Insurance under the National Health and Unemployment Acts, Workmen's Compensation and Employers' Liability Acts and Third Party Risks," and I understand that estimators usually price this at 1½ per cent. of the entire estimate, which contains wages, material and sub-contractors, so that the actual sum obtained is varied very considerably by the P.C.s put in for sub-contractors, who, of course, also charge their own percentage for this item.

I take it that the actual figure is about 3½ per cent. of the wages paid, and arrive at this figure as follows:—

	£	s.	d.
One week mechanic, 44 hours 1s. 8d.	3	13	4
One week labourer, 44 hours 1s. 3d.	2	15	0
	6	8	4
On this is paid by the employer:			
Health, 2s. 10d.		1	8
Unemployment, 2s. 9d. ...		1	6
		3	2
Other insurances, say 25s. per £100		1	6
		4	8

How do estimators arrive at the figure they charge, and is it not very irregular to make the amount dependent upon an item which quite independently pays its own insurance? Would it not be more correct to assess the wages on the particular job, and charge 3½ per cent. on this figure, but in any case rule out the sub-contractor and charge a higher rate? B. C. F.

Demolished Houses: Responsibility for Exposed Party Wall.

SIR,—I should be glad of advice on the following point: There are four houses in a block, two belonging to one leaseholder and two to another leaseholder. The district surveyor has ordered a considerable amount of work to be done to them. They are not slum or overcrowded property. One leaseholder cannot do what is required, so the Council has served a demolition order on the two houses, which means that if they are pulled down there will be a flank end where they joined the other two houses. What I want to know is, who will be responsible for strutting up and making the flank end good?

ANXIOUS.

ANSWERS.

Terms of Lease.

[ANSWERS TO "SURVEYOR," SEPTEMBER 25.]

SIR,—In order to give a satisfactory answer to the question raised, the covenants of the lease should be carefully perused. It may be that it could be found that the *ejusdem generis* rule applies. On the information given and on a consideration of the cases bearing on this matter, it does not appear that the defective lead gutter could be classified as a "structural defect." LEX.

SIR,—The definition of the lease, if this is a quotation, leaves much to be desired, but it is evident that the defects which the lessor reserves as his own responsibility were intended to be those which could not be foreseen by an examination of the premises at the commencement of the term.

Your correspondent does not state what form the defects to the gutter have assumed. If they are latent defects, which could not be assumed at the commencement of the term, the lessor would appear to be liable, but if they are the result of a defective construction which could have been seen at that time as likely to bring future trouble, the lessee would appear to be liable. LEASE.

Fixing of Steelwork.

[ANSWER TO "COUNTRY ARCHITECT," SEPTEMBER 25.]

SIR,—Provided the contractor is fully capable of carrying out the work, the matter becomes largely a matter of which of the two is cheaper. The manufacturers' men are thoroughly experienced with their firms' products, and are often able to erect these much quicker than another contractor. A firm supplying material is often able to quote excellent terms to their customers for fixing their own products, largely due to the fact that they have two contracts, one for supplying and one for fixing. Their figures for fixing is usually lower than an outside contractor, but against this it is often necessary for them to do the fixing straight off, and not when convenient for the rest of the work, as most contractors will do. Provided the contractor on the job is fully capable of doing the work and can quote a reasonable price for doing it, and the guarantees given by the steel company as to the steel are not altered by the fact that their men do not fix it, it may be advisable to give the work to the local contractor. W. E. W.

Defects in a House.

[ANSWERS TO "A. W. W.," SEPTEMBER 25.]

SIR,—"A. W. W." should take legal advice on this, for much depends on the terms of the deed of conveyance, also on whether there was a collateral agreement therewith which could be upheld. Furthermore, the building contract must be examined, for although primarily the liability rests on the vendor, it may be found advisable to join the builder in whatever action is taken.

LEX.

SIR,—The condition of "*caveat emptor*" (let the buyer beware) applies to the purchase of house property, unless otherwise arranged by the terms of the purchase. If it could be shown, however, that the vendor was well aware of latent defects at the time of the purchase, and yet represented the house he was selling as in sound condition, there would be grounds for action. Otherwise the responsibility for a proper inspection of the property by the purchaser rests with the latter. DEAL

Damp Foundations.

[ANSWERS TO "A. B.," SEPTEMBER 25.]

SIR,—The suggested slate damp-course method would doubtlessly improve the existing conditions, but it is very doubtful if it would prove entirely successful. A more effective method for preventing the percolation of water through the foundations would be to take up the floor boards and then fill up below the floor level with suitable materials.

Assuming there is a depth of 18 in. below the floor level, put in 10 or 12 in. of clinker or clean ashes and ram them well down. Then 3 in. of clean flint stones, not too small, and treat them similarly. Over the latter pour a grouting of cement and sand made by mixing thoroughly three parts of sand to one of cement, and making into a consistency of very thick cream with water. With a fairly stiff bristled broom well brush the grouting into the flint stones and then give them another good ramming. In some cases it has proved more satisfactory when 2 in. less of ashes or clinkers have been used, and on top of the grouted stones to put 2 in. of fine concrete. Before the latter finally sets, lay upon it not less than 1 in. of waterproofed cement. On top of the latter apply a coke breeze concrete, consisting of coke breeze five parts, sand three parts, and cement one part. Use not less than 2 in. thickness of the coke breeze concrete. For a few days lightly sprinkle water from a rose-watering can all over the concrete surface. When the latter is quite set and dry secure the floorboards. A. J. T. E.

SIR,—It would appear from the description given by your correspondent that the natural ground water level after rainfall is above the surface concrete of his house, and therefore no measure short of lining the foundation and walls with asphalt and further concrete would effectually prevent the water rising under the floor.

From previous experience I would suggest that your correspondent has the surface concrete covered with hardcore and a further layer of concrete up to a level of 6 in. below the damp-proof course, care being taken to see that the sleeper walls have sufficient gaps lefts for ventilating the floors. The outside drainage, including yard gullies, should be examined to see that all rainwater is carried away from the house as much as possible.

A. R. I. B. A.

THE BUILDING TRADE

MORE ABOUT RECURRING DEFECTS—XIV

By J. R. TAYLOR

DOMESTIC WATER SUPPLIES

(*Continued*).

The cost of raising hot-water supplies for domestic purposes or for the warming of buildings is much more dependent on the avoidance of waste than is generally realised. When hot water is drawn from the back boiler of a kitchen range that is not purposely lighted other than for cooking meals or for warming the living room, the waste of heat that may occur is more reflected in lack of abundance of supply than in direct addition to on-cost. But even so, one will find that larger fires are kept going than might otherwise be desired were not hot bath water in demand. When hot water is obtained from an independent source, heat losses due to want of care or skill in the lay-out are directly reflected in increased fuel consumption. Many of the causes of loss are, when considered individually, of no great importance, but the collective effect of a number of minor defects may be considerable.

Pipe Runs.

From the point of view of avoidance of heat losses, pipe runs should be as short as possible, and as far as practicable be on inner walls. As far as the primary flow and return are concerned (and the expansion pipe), there is rarely any difficulty about arranging these pipes satisfactorily. It is when the secondary or branch pipe runs are considered that difficulties present themselves. If it can be avoided, neither a hot- nor a cold-water branch should pass over a window, for there the draught will cool the one, and in winter perhaps lead to a burst in the other. Generally the pipes serving a scullery sink are close to a window, and frequently to a door opening also. This cannot always be avoided, but it is usually possible to case the pipes. Polished copper pipes neatly arranged look well, and many a plumber likes to show what he can do, and runs them on the face of a tiled bathroom wall. But copper is a good conductor, and from exposed pipes the heat losses may be considerable. In a sense a cylinder is only a large purpose-made bulge in the piping to be used for the storage of heat. Let it be noted that it is heat that is to be stored, and that a loss of heat is a leak.

Yet many people thrust on a cylinder the duties of a radiator, and then are disappointed at the reduction of available hot-water supply. Others will fix a cylinder in a kitchen alongside the range, and fail to lag it; the users open doors and windows to cool the kitchen as soon as the roast is taken out of the oven. They thus reduce the heat content of the cylinder at the same time, but are less to be blamed than the architect, builder, or plumber responsible for the lay-out. It is not good practice to permit uncontrolled escape of heat, even though the loss may be minimised by service. For instance, it is not desirable to put a cylinder into a small linen cupboard for the purpose of airing clothes, for a small coil would usually answer the purpose with less loss of heat. A cylinder in a bathroom may serve to warm the walls, floor and fittings, and aid in the reduction of condensation, but because the heat loss is continuous and uncontrolled an adverse balance results. It is, however, very desirable that some means of heating a bathroom should be provided, and where central heating is installed a radiator should be put in, and the towel rail be connected up to the heating system, rather than to the hot-water supply.

To insulate all the piping properly in even a comparatively small house in a neat manner is costly, but in the long run well worth while. Formerly, for what was regarded as good-class work, pipes were cased in, and because still air has great value as a means of insulation, the results were usually satisfactory as regards prevention of heat losses and avoidance of bursts due to frost. But invariably the interiors of these casings became very dirty, and sanitarians advocated surface-run pipings. It is certainly not easy to insulate pipes well neatly, for a large increase in apparent diameter is not to the taste of most people. In a school, a hospital or other large building, pipes of seemingly large bore do not strike us as being unsuitable; but we do not care for so much prominence in our houses. Moulded granulated cork, 1½ in. thick, effects a saving of about 85 per cent., but a ¾-in. service pipe covered with it will then have an external diameter of 4 in. or thereabouts. Hair felt ¾ in. thick will save some 80 per cent. (or so say the experts), but even then the apparent diameter will be 2½ in. In regard to this matter, a manufacturing firm of the highest standing finds it necessary, after quoting a table of "efficiency of pipe coverings," to state that though the information is derived from standard authorities it is not guaranteed. It is further stated that a pipe covering may be so good a conductor that by reason of the increased area of surface the loss from the covered pipe will be greater than from the naked pipe. But still air is so good a non-conductor that it should not be beyond the ingenuity of the engineer to find a method of using it without accumulating dirt and dust. For a cylinder that is to be enclosed in a cupboard, a removable hair jacket is obtainable and offers advantages. But if the cylinder is of good quality, and the installation has been thoroughly tested, a plastic type of covering put on by an experienced man will be satisfactory. It can be painted with enamel and is then easily cleaned.

Filling a Heating Installation.

It is undesirable that a heating system (hot water) should be emptied or refilled by any but experienced fitters, and this should be brought to the notice of users. It is not a matter of great difficulty, and we do not propose to describe the methods to be employed. But the inexperienced almost invariably set up an air lock on one or more radiators and, afraid to bring their difficulties to the notice of authority, "fiddle about" for days doing minor damage. If, as is usual, the boiler be provided with a draining cock, it should not be capable of being used for obtaining a supply of hot water for cleaning purposes; nor should it be possible for the unauthorised to obtain small quantities of hot water from air cocks on radiators. Trouble has frequently arisen in schools out of either or both of these practices. When a heating cellar or basement chamber is formed in a new building it should be drained, though for a small boiler it may be sufficient to provide a sump. But as far as possible the emptying of the installation should be avoided; and for this reason all radiators should be provided with two valves so that they may be taken out if necessary without emptying the remainder of the installation. One valve should be under the control of the user, so that he may regulate or shut off the heat, and the other be of a lock-shield pattern with loose key.

For very similar reasons the writer dislikes the fitting of an emptying cock on a domestic hot-water installation, or the fixing of stop cocks capable of shutting down the circulation between boiler and cylinder. If they have an effective loose key it is likely to be mislaid, and if the cock can be operated by means of a spanner there is a serious danger of misuse. The amateur mechanic may ill-use a watch until it is beyond repair, tinker with a motor-car until it will not go, and spoil much good timber in his attempted carpentry, but if he interferes with a hot-water installation he may endanger his own life and others.

THE CLERK OF WORKS

By A SURVEYOR.

Many a young operative's ambition is to become a clerk of works. The position is one that can be held for any length of time only by sheer merit, and it is one to which a craftsman may aspire, because a high percentage of clerks of works spring from the handicrafts. In many cases advertisers seeking these services make stipulation as to this. Not unnaturally, young men seek to know how such a position is attained, and are hardly satisfied when the answer is so laconically put as:—"By loyalty and hard work." And yet even this short answer might be curtailed, because "loyalty" implies hard work not only at the task in hand, but in fitting oneself to do better the work still to be undertaken. In an article that appeared in *The Builder* (January 17, 1930) I pointed out that an aspirant to the position of builder's foreman must possess a gift of leadership and train himself to apply it. Clerks of works must also have a gift, and although many of them were foremen before they were clerks, it is not quite the same gift as that of the born foreman. His gift, I think, may be more akin to one of the meanings of the word vocation. It is difficult to express it, but I think it may be put this way: A foreman's gift of leadership would find an outlet and keep him happy so long as he were allowed to lead, no matter at what; whereas the clerk of works could not be completely happy away from building, or at all events, large-scale construction work. But as things are, I have met clerks of works who in different circumstances would have become first-rate architects, as well as some architects who would have made extraordinarily able clerks of works.

Up to a point, the line of study for either position (foreman or clerk of works) is the same. Both need to be able to read a plan and prepare a working drawing, and the clerk will be all the better qualified if he can do a little freehand sketching at least sufficiently well to add clearness to any report, as, for instance, when "up against" an unforeseen constructional difficulty.

During or soon after their apprenticeship both should pass the senior examination in building construction, and while the one goes on to acquire a knowledge of builders' plant and machinery and how to handle them, the other will go a little more deeply into the theoretical side of building materials and learn how to test them. While both will require to know a good deal about the processes of all the various branch trades concerned with building, it is the clerk who will require the greater knowledge of theory because he will be called upon not infrequently to decide the method of surmounting a difficulty which cannot be deferred pending a decision by the architect, and disastrous results may follow a very small mistake.

A clerk of works must continually seek knowledge apart from that which comes to him by experience, so as to fit himself for each new job as it comes along. That is one of the reasons for stating that he must have a vocation, because otherwise such an everlasting study would become intolerable. Other gifts that will help him are quickness of perception, intuition and ability to improvise, though the last is perhaps more useful to the foreman. A little less freedom of speech than that sometimes indulged in by the foreman will become him; in fact, he will be no worse for cultivating a little reserve, as it is precision and not emphasis that is required of him. From his student days he should learn how to keep a concise record of material fact, as he will have to issue reports in readable English.

Notwithstanding that his position is defined in contract conditions as that of being solely an inspector under the architect, the clerk of works differs from the detective. Though he is expected to keep a sharp look-out for malpractices, these, if he is worth his salt, will not be attempted on any work in his charge. Properly conceived, his position is that of one of the team. Legitimate

mistakes and some differences of opinion are bound to arise, but forethought on his part will go a long way towards reducing their number. On a properly conducted job the clerk will be provided with a separate copy of every drawing and detail for his sole use, and he may do much to avoid difficulties by study and anticipation.

This short article is not intended to present even in outline the full qualifications and duties of the clerk of works. To do so properly would require many articles. But before leaving the subject, there is one point that should be touched on because it is one requiring ventilation. Some committees, public and private, know so little about the proper conduct of building works that they keep the appointment of a clerk of works in their own hands and require him to report direct. This puts him in a position of great difficulty, particularly if, though not lacking in practical experience of the trade, he is comparatively new to the duties he is expected to undertake. It is as though a subordinate were called upon to report independently at an inquest, and every committee meeting assumes the guise of a coroner's jury. No trained and experienced clerk of works much likes such a job, though he sometimes driven to take it for lack of another. If he is wise his official reports, though accurate, will lack colour, and he will supplement them by short reports to his proper chief, the architect, at frequent intervals.

BRITISH STANDARD SPECIFICATIONS

ASBESTOS CEMENT SLATES AND UNREINFORCED FLAT SHEETS AND CORRUGATED SHEETS.

For many years the preparation of a B.S. Specification for asbestos cement slates and sheets has been in hand, and the first stage of the work has now been completed with the issue of B.S.S. No. 690, "Asbestos Cement Slates and Unreinforced Flat Sheets and Corrugated Sheets."

The specification relates solely to the dimensions and workmanship of the products. It includes tables, giving ranges of standard sizes for the different forms of slates and sheets, whilst the reliability of the workmanship is tested by means of a transverse test. The manner in which this test is to be made is outlined in detail in an appendix.

The foreword to the specification emphasises that although there are no requirements for composition, nor are there adequate performance tests, these are questions which are still the subject of investigations. Satisfactory progress is being made in this work, and it is hoped that appropriate requirements will be available for incorporation in an early revision of the specification.

Some interesting information relating to the use of asbestos cement corrugated sheets on roofs is given for general guidance in another appendix. The information includes recommendations with regard to expansion joints and methods of fixing the sheets, the maximum spacing of purlins to be adopted, and the relative advantages of small and large corrugations.

PRECAST CONCRETE KERBS.

The British Standards Institution have just issued a revision of B.S.S. No. 340, "Precast Concrete Kerbs, Channels and Quadrants." The specification was revised in order to make provision for certain modifications and improvements which have become desirable since it was first issued.

One of the principal modifications which have been made is the omission of specific requirements relating to the details of manufacture, as for example the composition of the mixture, nature of the moulds, methods of moulding, and period of maturity, it having been considered that the basis of acceptance of the kerbs and channels should be their ability to meet the requirements of the specified mechanical tests, and that it should be open to the manufacturer to adopt such methods of manufacture, curing, and maturing as he might find to be most economical and satisfactory.

Another important change relates to the standard sections of the kerbs. The two sections of half-battered kerb remain unaltered, but in regard to the three rectangular sections previously given, a considerable measure of simplification has been effected by the substitution of two new sections of such a design as to require only one pattern of mould and hence facilitate their economical production. The new sections furnish the batter which is considered desirable to ensure satisfactory service from concrete kerb and, moreover, provide the same width at the top as at the bottom. They may be used as kerb or channel, and when used as kerb may be laid vertically or horizontally.

The specification has also been modified in respect of the loads to be supported in the transverse test, which, with due regard to the modifications in design, are relatively greater than those formerly standardised, this modification being considered to be justified by the superior quality of cement now available and the improved methods of kerb manufacture now followed.

A note to the specification emphasises that it is assumed that in all cases the cement and aggregate will have been properly graded and the products properly matured. It also states that the design of the kerbs has been fixed on the assumption that in laying, proper provision will be made for expansion.

OXY-ACETYLENE WELDING AS APPLIED TO STEEL STRUCTURES.

The publication of B.S.S. No. 693, "Oxy-Acetylene Welding of Steel Structures," makes a further addition to the series of B.S. Specifications relating to welding that are now available. The new publication is complementary to B.S.S. No. 538, which was issued in 1934, for the "Metal Arc Welding of Steel Structures," and accordingly follows the same general lines. It includes, amongst others, requirements for the methods of making the joints, the maximum working stresses to be permitted, the workmanship and flame conditions to be maintained, and the tests to be carried out on welded joints.

There are a number of appendices which give a considerable amount of useful information. In the specification reference is made to the limiting thickness of material which can be welded by the "leftward" and "rightward" processes. A detailed description of these processes is therefore given in one appendix.

In another clause the maximum size of fillet welds to be made with one run is specified, and it is stated that where two or more runs are used the step or layer method of making welds is to be adopted. Another appendix is therefore devoted to describing this procedure.

In the absence of a B.S. Specification governing the quality of welding rods for oxy-acetylene welding, appropriate requirements have been included in a further appendix, whilst the methods of making the test pieces and of carrying out the tests on both weld joints and on all-weld-metal test pieces are also described separately.

In view of the special features of welding technique in relation to the design of steel-frame building, another appendix gives some general notes for guidance. Special attention is called in this to the necessity for taking adequate precautions to minimise distortion.

Copies of the above-mentioned specifications may be obtained from the Publications Department of the British Standards Institution, 28, Victoria-street, London, S.W.1. Price 2s. 2d., post free.

BOOK REVIEWS

Housing Administration: A Practical Handbook for the use of Public Health Officials and others interested in Housing. By Stewart Swift, Chief Sanitary Inspector of the City of Oxford. London: Butterworth & Co.; Shaw & Sons. Price 25s.

This is not a legal text-book, but, as the author states in his preface, is intended as a supplementary volume to such works, and may, we think, be described as a guide to the practice involved in the administration of the law relating to housing, and thus intended to assist those called upon to put the law in operation, and as such, in our opinion, should prove a useful addition to the strictly termed legal text-books, as it is founded on both the personal experience of the author in a number of widely differing districts over a period of fifteen years, augmented by that of many of his friends acquired in different parts of the country.

The text is clear and the matter well arranged, and where references to the Statutes occur the author has wisely, in nearly every instance, given the text of the sections verbatim instead of giving a synopsis or précis. The work appears comprehensive, and forms and plans which have been used in actual practice will be found in the text, and between pages 120 and 121 there are maps of clearance areas. The author, in his preface, invites readers to draw attention to any faults or inaccuracies they may discover: but in the examination we have been able to make the work appears to have been very carefully carried out and brought well up to date. For instance, the decision of the Court of Appeal reversing that of the High Court in the case Jarrow North Ward Clearance Order No. 1, is given in a note at page 162. The reader will not, however, find himself troubled with legal decisions, except in the two chapters on appeals which have been usefully included; and this volume appears to us a valuable, straightforward guide, not only on the practice, under the Housing Acts, but of assistance in acquiring easily an insight into the whole subject, which should be very serviceable to all concerned with, or interested in, the questions covered by the Housing Acts.

The Electrician Annual Tables of Electricity Undertakings. London: Benn Brothers, Ltd., E.C.4. Price 10s.

The current issue of these tables represents a complete and conveniently presented record of statistical information relating to electricity supply. All data have been revised, and every effort has been made to ensure accuracy. In particular, the tabulated information presented in so short and useful a compass about the national power or "grid" schemes has been revised up to the time of going to press, and a careful survey of "grid" progress and developments is included. The issue should be specially valuable as a reference book for architects and contractors, whose work so often calls for a detailed knowledge of the local conditions upon which electric light and power are supplied.

BUILDERS' MERCHANTS' ALLIANCE: COURSES OF INSTRUCTION.

The Builders' Merchants' Alliance, Ltd., has decided not to hold any lectures on trade subjects during the coming winter, but, provided there is sufficient support, to give a series of lectures on the undermentioned subjects: Salesmanship, five lectures; transport, one lecture; legal questions arising in everyday commerce, one lecture; traders' position in relation to bankruptcies and deeds of arrangement, one lecture; the work of the B.M.A., one or two lectures. As there are only ten lectures at the most, it is suggested they should take place during the first quarter of 1937. They will be held on one night of the week (probably Tuesday), beginning at 7.30 p.m. and finishing at 8.30 p.m. The fee for the course will be one guinea.

NEW BUILDINGS IN LONDON

The Editor would be glad to receive information for publication under this heading from architects, builders, or other persons concerned. Items should be received at THE BUILDER *Office not later than Wednesday morning.*

ADDINGTON.—CAFÉ.—The Croydon C.B. has approved plans submitted by Mr. J. Stevens, "Ye Red Knight," Addington, for a café adjoining the "Ye Red Knight," corner of Addington Village-road, and Gravel Hill.

BAYSWATER. — RESIDENCES.—The Palm Bay Estates, Ltd., Thanet House, Craven-road, W.2, has accepted the tender of Messrs. Ford and Walton, Ltd., 254, High-road, Kilburn, N.W., for a number of town houses and garages at the corner of Westbourne-street and Stanhope-street, W.2. The plans have been prepared by Mr. Brian L. Sutcliffe, F.R.I.B.A., 5, Manchester-square, W.1.

BRIXTON-HILL. — FLATS. — Work has started on the erection of blocks of flats in Brixton-hill, Dumbarton-road and Felsberg-road, and to be known as "Dumbarton Court." The architects are Messrs. Couch and Coupland, Paradise-road, Richmond.

CAMDEN TOWN. — ALTERATIONS.—And extensions are to be made to the factory premises at 70-76, York-road, N.W., for the British Legion. The contractors are Messrs. W. S. Barton and Co., Ltd., 34, Hart-street, W.C.1. The architects are Messrs. Douglas and J. D. Wood, F. & A.R.I.B.A., 1, Old Burlington-street, W.1.

CANNING TOWN. — BATH. — The West Ham C.B. are inviting tenders for the construction of open-air bath, with offices, dressing-rooms, etc., at Beckton-road Recreation Ground. Mr. W. Lionel Jenkins, M.A., M.Inst.C.E., Borough Engineer, has prepared the plans.

CROYDON. — BUILDING. — Among the building schemes approved by the C.B. were the following: Rebuilding of South Norwood School by Messrs. R. Mansell, Ltd., 17, Grant-road, Croydon, at £25,464; rebuilding St. Luke's School, by Messrs. G. J. Green and Son, Ltd., 138, Cherry Orchard-road, Croydon, at £4,300; reconditioning Howard School, by Messrs. C. F. Hawkings and Co., Ltd., 33, Linden-grove, Peckham, S.E.15, at £3,905; reconditioning Rockmount School, by Messrs. E. B. Hart and Co., Woodmere-avenue, East Croydon, at £596; two houses and 64 flats on the Davidson-road estate, by Mr. G. Burgess, 135, Beresford-avenue, Tolworth, at £24,965 12s. 2d.; provision and reconstruction of greenhouses at Coombe Cliff, Grangewood, and Norwood-grove, by Messrs. Messenger and Co., Ltd., of Loughborough, at £2,830 5s.

CROYDON.— SHOWROOM.— Messrs. Bates and Sinning, 27, Queen Victoria-street, E.C.4, are the architects for a new showroom, workshop and living-room at 380-384, London-road, Broad Green.

CROYDON.—SHOWROOM.—The C.B. has passed plans submitted by Mr. P. Richardson, 139, Wickham-road, for a workshop and showroom at Bedford Park garage, Bedford Park.

CROYDON.—REBUILDING.—The owners of the "Gun Tavern," in Church-street, have informed the C.B. that they propose to rebuild the premises.

CROYDON.—BATHS.—The C.B. are proposing schemes for new public baths in the neighbourhood of All Saints' Church, Upper Norwood, and at Woodside Fire Station, and on a site adjoining the Norbury branch library.

CROYDON.—ADDITIONS.—Messrs. Mann, Crossman and Paulin, Ltd., 220, Whitechapel-road, E.1, have had plans approved for alterations and additions, to "Pawsons Arms" public-house, 29, Pawsons-road, Whitehorse Manor.

CROYDON.—REBUILDING.—Messrs. Page and Overton's Brewery, Ltd., Shirley Brewery, Surrey-street, are to rebuild "The Crown" public-house, with rooms over, at 28, Wickham-road, and rebuilding of the "Six Bells" beerhouse, with living rooms over, at Handcroft-road, Broad Green.

DAGENHAM.—FIRE STATION.—The U.D.C. are inviting tenders for a fire station at the new civic centre.

DARTFORD.—EXTENSION.—The T.C. are inviting tenders for an extension to the public library building in Market-street. The Borough Surveyor has prepared the plans.

EALING.—HOUSES.—The T.C. are inviting tenders for 32 houses at Northolt, from plans by Mr. F. J. Forty, borough engineer.

ESHER.—FLATS.—The London and Provincial Property Society, Ltd., 19, Victoria-street, S.W.1, have acquired a site at The Green for a block of 25 flats. The architect is Mr. Ronald Ward, 33, St. George's-road, S.W.1. No contracts placed.

GIPSY HILL.—FLATS.—Are to be erected at Nos. 97-101, for Messrs. Harold Samuel Properties, Ltd., 15, Stratton-street, W.1. The plans are by Mr. C. T. Prangnell, A.R.I.B.A., of the above address. No contracts placed.

HENDON.—FLATS.—Plans have been prepared by Mr. W. F. Thorpe, F.S.I., 26, The Broadway, Mill Hill, N.W., for 55 flats on the Golf Course estate, N.W. No contracts placed.

HOUNSLOW.—BATHS.—As part of their development scheme, the West Hounslow Super Cinemas, Ltd., 23, Charing Cross-road, W.C.2, propose to build a swimming pool, open-air café, etc., at the rear of the new Regal cinema, in Bath-road. The architect is Mr. W. J. King, F.R.I.B.A., Piccadilly House, Jermyn-street, S.W.1.

JERMYN-STREET. — ALTERATIONS. — And improvements, are to be carried out to the Haymarket Hotel, Nos. 1-5, for Mr. H. J. Pilbrow. The contractors are Messrs. Henry Kent (Builders), Ltd., 51, Beacon-road, Hither Green, S.E. The architects are Messrs. G. E. Nield and Son, Outer Temple, Fleet-street, E.C.4.

KENNINGTON-ROAD. — FACTORY. — No contracts yet placed for the factory to be erected at Nos. 365-375, from plans prepared by Messrs. H. Payne Wyatt, Son and Partner, architects, 465, Brixton-road, S.W.9.

KINGSBURY.—EXTENSION.—Messrs. Charrington and Co., Ltd., Anchor Brewery, Mile End-road, E.1, have decided to considerably extend their "Prince of Wales Hotel," for which plans have been prepared by Messrs. Nowell Parr and Son, 42, Cranley-gardens, South Kensington, S.W.7. The builders are Messrs. F. and H. F. Higgs, Ltd., Station Works, Hinton-road, Herne Hill, S.E.

LAMBETH. — BAKERY. — Messrs. David Greig, Ltd., have had plans approved for a new bakery and alterations to the existing premises in Gray-street.

LAMBETH.—ALTERATIONS.—The B.C. has approved plans by Messrs. Crickmay and Sons, 13, Victoria-street, S.W.1, for alterations to the "Canterbury Hotel," Canterbury-road and Pope's-road, S.W.

LAMBETH.—OFFICES.—Messrs. Epps and Ponder, FF.R.I.B.A., 616, Bank-chambers, 329, High Holborn, W.C.1, are the architects for a three-story office building at 3, 5 and 5A, Juxon-street, and 98, Lambeth-walk. The application has been approved.

LAMBETH.—ADDITIONS.—Plans for additions to the "Paulet Arms" public-house, Paulet-road, for Messrs. Courage and Co., Ltd., brewers, Horselydown, S.E.1, have been approved by the B.C.

LAMBETH-ROAD.—ALTERATIONS.—Messrs. H. Darby and Son, 75, Lea Bridge-road, E.10, are the builders for alterations to the "Mason's Arms" public-house, No. 17, from plans prepared by Messrs. Eedle and Meyers, architects, 8, Railway-approach, London Bridge, S.E.1.

LOUGHBOROUGH PARK. — FLATS. — No contract has yet been settled for the flats to be erected at Nos. 113-125. The architect is Mr. Edward Hamilton, F.R.I.B.A., 19, Hobart-place, S.W.1.

MAPLE-STREET, W.1. — REBUILDING. — Messrs. Watney, Combe, Reid and Co., Ltd., Stag Brewery, S.W.1, have under consideration the rebuilding of the "Yorkshire Grey" public-house. The brewery architect is Mr. A. W. Blomfield, F.R.I.B.A. No contracts placed.

MERTON. — PAVILION. — The Old Rutlishians' Association have decided to build a new pavilion, with changing-rooms, baths, dance floor, etc., at their sports ground in Poplar-road, S.W., costing about £4,000. The contract has been placed with Messrs. G. W. Taylor, Ltd., 11, Windsor-street, Chertsey.

MITCHAM.—FLATS.—The Monarch Properties, Ltd., 7, Princes-street, S.W.1, have under consideration preliminary details for 34 shops and flats in London-road. No contracts placed.

NORWOOD.—EXTENSIONS.—"The Hope" public-house, 49, High-street, S.W., is to be extended from plans prepared by Messrs. Clemence and Co., St. Mary's House, Quarry-street, Guildford. The plans have been approved by the Lambeth B.C.

NORWOOD.—FLATS.—The Lambeth B.C. has approved an application by Mr. M. Wray for a block of shops and flats at 451, Norwood-road.

REGENT'S PARK.—FLATS.—Messrs. W. and M. Negus, Ltd., Station Works, King James-street, S.E.1, are the contractors for two further blocks of flats at Frederick-street, N.W. The architect is Mr. H. Kempson Dyson, Charlbert-court, N.W.8.

RICHMOND.—FLATS.—It is proposed to demolish the "Richmond Hill Hotel," Richmond Hill, and erect a six-story block of 53 flats. Plans have been prepared by Messrs. Brewer, Smith and Brewer, Queen Anne House, The Green, Richmond, and Mr. Gervase Bailey, King's-buildings, Smith-square, S.W.1. No contracts placed.

ST. PANCRAS.—DWELLINGS. — The B.C. has been recommended to accept the tender of Messrs. M. J. Gleeson, Ltd., London-road, North Cheam, at £34,918, for 55 working-class dwellings in Carlow-street, N.W. The architect is Mr. A. J. Thomas, F.R.I.B.A., 31A, Sloane-street, S.W.1. The quantity surveyors are Messrs. Waggett and Bradford, Carlton-chambers, Regent-street, S.W.1.

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SHEPHERD'S BUSH. — BUILDING. — The Hammersmith B.C. has approved plans submitted by Mr. H. W. Barman for a new extension to a building at 19, Hythe-road.

SHOREDITCH. — FLATS. — Messrs. A. T. Rowley (London), Ltd., Cambridge Works, Lordship-lane, Tottenham, N., are to build a further block of working-class flats in Poole-street, for the Shoreditch Housing Association, Ltd., 28, Commercial-street, E.1. The architect is Mr. John Dower, A.R.I.B.A., 5, Verulam-buildings, Gray's Inn, W.C.1.

SOHO.—PREMISES.—Work is about to commence on the development of the large site in Broad-street, W.1, where extensive business premises are to be erected to the plans of Mr. Bertie Crewe, 75, Shaftesbury-avenue, W.1. The contractors are Messrs. E. D. Winn and Co., Ltd., 36, Wilton-place, S.W.1.

SOUTHWARK.—ALTERATIONS.—And additions, are to be made to the factory in Southwark-street, S.E.1, of Messrs. Stevenson and Howell, Ltd. The contract has been placed with Messrs. F. and H. F. Higgs, Ltd., Station Works, Hinton-road, Herne Hill, S.E. The architects are Messrs. Hayward and Maynard, 14, John-street, W.C.1.

STEPNEY. — BUILDING. — Mr. Morris de Metz, A.R.I.B.A., 13, Devonshire-terrace, W.2, is the architect for a new building at 38-40, Commercial-road East.

STOCKWELL - ROAD.—CONVERSION.—The L.C.C. has approved an application by Mr. Richard Oughton, estate agent, 340, Brixton-road, S.W.9, for conversion into shops of Nos. 174-178 (even)

STRAND.—ALTERATIONS.—And additions, are to be made to the premises in Milford-lane, W.C.2, for which plans have been prepared, for the "Illustrated London News and Sketch," Ltd., 32, St. Bride-street, E.C.4. The contractors are Messrs. F. and H. F. Higgs, Ltd., Station Works, Hinton-road, Herne Hill, S.E.

THROGMORTON - AVENUE. — ALTERATIONS.—Are to be made to the branch post office by Messrs. Higgs and Hill, Ltd., 14, Godliman-street, E.C.4, for H.M.O.W.

TOOTING. — RECONDITIONING.—H.M.O.W. have placed a contract with Messrs. F. Troy and Co., Ltd., 194-196, Finchley-road, N.W.3, for reconditioning work at the Tooting sorting office.

UPPER NORWOOD. — LIBRARY. — Spurgeon's College, Falkland Park, South Norwood Hill, S.E.25, are to erect a library, with nine bedrooms over, connected to main building by corridor, adjoining the College.

UPPER NORWOOD. — SHOPS. — Messrs. Toms and Partners, 115, Park-street, W., are to design 16 shops and 42 flats at the corner of Beulah Hill and Crown Hill, S.E.19.

WADDON.—FLATS.—The Croydon C.B. has approved plans by Mr. P. Randall Cook, Mercantile and Textile Exchange Buildings, St. Paul's Churchyard, E.C.4, for a block of flats at "Elmhurst," between St. Peter's-road and Heathfield-road.

WADDON.—FACTORY.—The Nevelin Electric Co., Ltd., 107-111, New Oxford-street, W.C.1, are to have a new factory and offices, at the corner of Purley-way and Commerce-way.

WATFORD. — BUILDING. — H.M.O.W. are inviting tenders for an analytical laboratory, etc., at the Building Research Station.

WATFORD.—LIBRARY.—The T.C. are inviting tenders for the erection of a branch library at St. Albans-road, North Watford. Mr. W. W. Newman, borough engineer, has prepared the plans.

WOOD GREEN.—ALTERATIONS.—Are to be made to 26-36, High-road, for Messrs. A. Barton and Co., Ltd., from plans prepared by Messrs. Vine and Vine, A.A.R.I.B.A., architects. Tudor-chambers, Station-road, Bowes Park, N.22. The builders are Messrs. Mattock and Parsons, 165, Gray's Inn-road, W.C.1.

NEW CINEMAS

ACTON.—Odeon Theatres, Ltd., of Birmingham, are to erect a cinema in King-street. The architect is Mr. George Coles, F.R.I.B.A., 40, Craven-street, W.C.2.

BIRMINGHAM (PERRY BAR).—Mr. E. S. Roberts, L.R.I.B.A., Lombard House, Great Charles-street, Birmingham, is the architect for a cinema to be erected at Walsall-road and Tower-hill for Messrs. Salberg, Clift and Twist.

BRIGHTON.—Mr. F. W. Morgan, 52, Eastcote-road, Pinner, Middx., has prepared plans for a cinema in Lewes-road. The builders are Messrs. William Willett; Ltd., Sloane-square, S.W.1.

CAMBERWELL.—Mr. Albert Bacal, 37, Golden-square, W.1, is to erect a cinema on a site in the Camberwell-road. The architect is Mr. F. E. Bromige, 84, Regent-street, W.1.

CLEETHORPES.—The Union Cinema Co., Ltd., York House, Regent-street, S.W.1, are to erect a cinema on a site in Grimsby-road, and have placed a contract with Messrs. Taylor and Coulbeck, Chapman-road, Cleethorpes. The architect is Mr. Robert Cromie, F.R.I.B.A., 6, Cavendish-square, W.1.

COVENTRY.—Mr. A. W. Pell, proprietor of the Imperial Cinema, Earlsdon, is proposing to erect a cinema at the junction of Fletchamstead-highway and Tile-hill. The architect is Mr. George Cave, L.R.I.B.A., 7, Little Park-street, Coventry.

DUMBARTON.—Plans have been prepared for a scheme of reconstruction to the Regal cinema. The architects are Messrs. Lennox and McMath, 103, Bath-street, Glasgow, and Mr. Samuel Aitken, of Glasgow, will carry out the building work.

EAST HAM.—Plans have been approved by the Corporation for the rebuilding of the Boleyn Cinema. The architect is Mr. Cecil Masey, F.R.I.B.A., 15, Caroline-street, W.C.1.

GLASGOW.—Plans have been approved by the Dean of Guild Court for the demolition of St. Enoch's cinema and the erection of a new cinema. Mr. George Boswell, 256, West George-street, Glasgow, is the architect. Messrs. Robert Gilchrist and Son, Ltd., of Glasgow, will carry out the building work.

GLENBOIG.—Plans have been prepared by Messrs. Stellmac, Ltd., 57, Oswald-street, Glasgow, for a cinema. They will also carry out the building work.

GUERNSEY.—Mr. Lou Morris, 52, Shaftesbury-avenue, W.1, is connected with a scheme for the erection of a cinema at Monument-gardens. Messrs. Thomas and Edge, Ltd., 25, Greens End, S.E.18, are the contractors for the work.

LARNE.—The Union Cinema Co., Ltd., 15, Lower Regent-street, W.1, have acquired a site from the Northern Ireland Transport Board for the erection of a cinema.

LEIGH-ON-SEA.—A cinema with accommodation for 1,900 persons, a café and ball-room, shops, car park, etc., is to be erected in London-road and Blenheim-terrace, for a newly-formed syndicate. The plans have been prepared by Mr. F. L. Buckley, 9, Dale-road, Leigh-on-Sea. No contracts let.

LEYTON.—Mr. F. E. Bromige, 84, Regent-street, W.1, is the architect for a cinema to be erected in the High-road for Dominion (Bakers' Arms), Ltd.

LOUGHTON (ESSEX).—The Loughton Cinema in High-road is to be completely rebuilt and enlarged to accommodate about 1,500 persons. The plans have been prepared by Messrs. Howis and Belcham, 9, Fenchurch-street, E.C.3. No contracts let.

MANCHESTER.—The Moseley Construction Co., Ltd., Manchester 8, have obtained the contract for the erection of a cinema at Dean-lane, Moston, for the Victory Pictures (Manchester), Ltd., 7, Oxford-road. The architect is Mr. H. A. Yearsley, L.R.I.B.A., 7, Oxford-road.

NOTTINGHAM.—The contract has been placed with Messrs. W. J. Sims, Sons and Cooke, Ltd., Haydn-road, Sherwood, Nottingham, for the erection of a cinema in Mansfield-road, Sherwood, for Mr. T. Wright, of Westlake-lane, Mapperley, Nottingham. Mr. Reginald W. Cooper, A.R.I.B.A., Queen's-chambers, King-street, Nottingham, is the architect.

PLYMOUTH.—Messrs. Sound and Movement Cinemas, Ltd. (Messrs. W. Mumford and G. Prance), propose the erection of a cinema in Wolseley-road, Milehouse.

SPALDING.—The Spalding Picture House, Ltd., have acquired a site in Westland-street for the erection of a cinema. The contract has been placed with Messrs. W. and F. Chell, Albert-road, West Bridgford, Notts. The architect is Mr. A. J. Thraves, F.R.I.B.A., Whitefriars House, Friar-lane, Nottingham.

TADCASTER.—Plans have been approved for the erection of a cinema in Westgate, for Messrs. M. Hartley and Sons, Ltd.

TADCASTER.—Plans have been approved for the erection of a cinema in Kirkgate, for the Cosy Cinema Co., Ltd.

BUILDERS AT GOLF

NOTWITHSTANDING the Building Exhibition, there were over a hundred present at the autumn meeting of the Building and Allied Trades Golfing Association, held at Moor Park on September 22. The meeting went off excellently and the results were as follow :—

SINGLES.—Scratch Prize. This resulted in a tie, at 81, between W. J. Rice, M. Tait, L. E. Hetherington, and C. J. Mead. The prize was given to Mr. Hetherington after drawing.

SINGLES.—Senior. This was won by W. J. Rice with 71 net, C. J. Mead, H. R. Willis and Leslie Warren tieing at 75 net for second place. Won by Mr. Mead on last nine holes.

SINGLES.—Junior : 1, L. Pearce, 75 net; 2, A. H. Chelmick, 76 net.

The Builder Trophy was won by W. J. Rice with 71 net.

The "DYKE" CUP resulted in another tie between C. J. Mead and Leslie Warren, with 75 net. Won on last nine holes by Mr. Mead.

The FOURBALL FOURSOMES resulted in wins for Messrs. Chelmick and Chelmick (won on last nine holes), Messrs. Dawson and Tait taking second prize from Messrs. Hetherington and Nichols and Messrs. Darvell and Willis after a draw. All four pairs finished three holes up on bogey.

The annual general meeting was held after tea. The captain, Mr. George Ball, was unanimously re-elected, as was the hon. secretary, Mr. Hubert H. Hill. The following members were elected for the committee for the year : Mr. Harold G. Dyke, Mr. Francis Jackson and Mr. Newling Ward.

It was decided to hold the annual dinner about three weeks before Christmas, and in regard to the spring meeting, this was left in the hands of the hon. secretary to arrange either at Sunningdale or St. George's Hill.

The membership of the Society has now grown to be a very large one. Votes of thanks to the captain and the hon. secretary, when members expressed how they had enjoyed the day, terminated the meeting.

DECORATORS' TRAVELLING EXHIBITION.

The travelling exhibition (consisting of the prize-winning work submitted by craftsmen and apprentices for the 1936 competition (organised by the National Painters' and Decorators' Joint Education Committee of England and Wales) will be displayed in London as under :—

At the L.C.C. School of Building, Ferndale-road, Brixton, S.W.4 : From Monday, September 28, to Thursday, October 15, inclusive (Saturdays and Sundays excepted) from 10 a.m. to 8 p.m.

At the Northern Polytechnic, Holloway-road, N.7 : From Tuesday, October 20, to Friday, November 6, inclusive (Saturdays and Sundays excepted), from 10 a.m. to 8 p.m.

RATES OF WAGES IN THE BUILDING TRADE

AS AND FROM 1st JANUARY, 1936.

[Every endeavour is made to ensure accuracy, but we cannot be responsible for errors.]

	Crafts-men.	Lab-ourers.		Crafts-men.	Lab-ourers.		Crafts-men.	Lab-ourers.		Crafts-men.	Lab-ourers.
Aberdare	1/6	1/1½	Clitheroe	1/5½	1/2	Isle of Thanet	1/4	1/-	Sawbridgeworth	1/4½	1/0½
Abergavenny	1/6	1/1½	Cobham	1/5	1/0½	Isle of Wight	1/3½	11½	Saxmundham	1/2½	11
Abingdon	1/5	1/0½	Colchester	1/5½	1/1½	Keighley	1/6½	1/2	Scarborough	1/6	1/1½
Accrington	1/6½	1/2	Colwyn Bay	1/5½	1/1½	Kenilworth	1/6½	1/2	Selby	1/6½	1/2
Aldeburgh	1/2½	11	Congleton	1/6	1/1½	Kettering	1/6	1/1½	Sevenoaks	1/5	1/0½
Aldershot	1/3½	11½	Coventry	1/6½	1/2	Kidderminster	1/5½	1/1½	Sheerness	1/4	1/-
Alfreton	1/6½	1/2	Cranbrook	1/3	11½	King's Lynn	1/4	1/-	Sheffield	1/6½	1/2
Alnwick	1/6	1/1½	Cranleigh	1/3½	11½	Kirkham	1/6½	1/2	Shipley	1/6½	1/2
Altrincham	1/6½	1/2	Crawley	1/4½	1/0½	Knowle	1/6	1/1½	Shoeburyness	1/6	1/1½
Amble	1/6	1/1½	Crewe	1/5½	1/1½	Lancaster	1/6½	1/2	Shoreham	1/5	1/0½
Amersham	1/4½	1/0½	Cromer	1/3½	11½	Leamington	1/6	1/1½	Shrewsbury	1/5½	1/1½
Ammanford	1/6½	1/2	Crowborough	1/4½	1/0½	Leatherhead	1/5½	1/1½	Sittingbourne	1/3½	11½
Andover	1/3½	11½	Cuckfield	1/4½	1/0½	Leeds	1/6½	1/2	Skegness	1/5½	1/1½
Ardingley	1/4½	1/0½	Darlington	1/6½	1/2	Leicester	1/6½	1/2	Sleaford	1/5	1/0½
Arundel	1/4	1/0	Darwen	1/6½	1/2	Leighton Buzzard	1/3½	11½	Slough	1/5½	1/1½
Ascot	1/4½	1/0½	Daventry	1/5	1/0½	Letchworth	1/5	1/0½	Southampton	1/5½	1/1½
Ashby-de-la-Zouch	1/5	1/0½	Deal	1/4	1/-	Lewes	1/3	11½	Southend-on-Sea	1/6	1/1½
Ashford (Kent)	1/3½	11½	Denbigh	1/5	1/0½	Lichfield	1/5½	1/1½	Southport	1/6½	1/2
Ashford (Middlesex)	1/5½	1/1½	Derby	1/6½	1/2	Lincoln	1/6½	1/2	South Shields	1/6½	1/2
Ashington	1/6	1/1½	Devizes	1/3*	11½	Littlehampton	1/4	1/-	Spalding	1/4	1/-
Ashstead	1/5	1/0½	Dewsbury	1/6½	1/2	Liverpool	1/8‡	1/3½	Stafford	1/6	1/1½
Ashton-under-Lyne	1/6½	1/2	Didcot	1/4½	1/0½	Llandudno	1/5½	1/1½	Staines	1/5½	1/1½
Aylesbury	1/4	1/0	Diss	1/3	11½	Llanelly	1/6½	1/2	Stamford	1/5	1/0½
Aylsham	1/3½	11½	Doncaster	1/6½	1/2	London:			Stevenage	1/5	1/0½
Bagshot	1/3½	11½	Dorchester	1/4*	1/-	12 m. radius	1/8*	1/3	Stockport	1/6½	1/2
Banbury	1/4	1/0	Dorking	1/4½	1/0½	12-15 m. radius	1/7½*	1/2½	Stockton-on-Tees	1/6½	1/2
Barnsley	1/6½	1/2	Dover	1/4	1/-	Long Eaton	1/6½	1/2	Stoke-on-Trent	1/6½	1/2
Barnstaple	1/4½	1/0½	Dovercourt	1/4½	1/0½	Longton	1/6½	1/2	Stourbridge	1/6	1/1½
Barrow-in-Furness	1/6½	1/2	Driffield	1/5	1/0½	Loughborough	1/6½	1/2	Stourport	1/5½	1/1½
Barry	1/6½	1/2	Droitwich	1/5½	1/1½	Louth	1/5	1/0½	Stowmarket	1/3	11½
Basingstoke	1/4	1/0	Dudley	1/6½	1/2	Lowestoft	1/4½	1/0½	Stratford-on-Avon	1/5	1/0½
Bath	1/5½	1/1½	Dunstable	1/4½	1/0½	Luton	1/6	1/1½	Stroud	1/5†	1/0½
Batley	1/6½	1/2	Durham City	1/6½	1/2	Macclesfield	1/6	1/1½	Sunderland	1/6½	1/2
Beaconsfield	1/4½	1/0½	Eastbourne	1/5½	1/1½	Maidenhead	1/5	1/0½	Sutton Coldfield	1/6½	1/2
Beccles	1/3	11½	E.Glam.(Mon.Val.)	1/6	1/1½	Maidstone	1/5	1/0½	Swaffham	1/2½	11
Bedford	1/5½	1/1½	East Grinstead	1/4½	1/0½	Malvern	1/5	1/0½	Swanage	1/4½*	1/0½
Berkhamsted	1/4	1/-	Edenbridge	1/4½	1/0½	Manchester	1/6½	1/2	Swansea	1/6½	1/2
Berwick	1/5½	1/1½	Ely	1/3	11½	Manningtree	1/3	11½	Swindon	1/5*	1/0½
Beverley	1/6½	1/2	Epping	1/6½	1/2	Mansfield	1/6½	1/2	Tamworth	1/6	1/1½
Bexhill-on-Sea	1/4½	1/0½	Exeter	1/5½†	1/1½	March	1/3½	11½	Taunton	1/4½	1/0½
Bideford	1/4½	1/0½	Exmouth	1/4½	1/0½	Margate	1/4	1/-	Tenterden	1/3½	11½
Biggleswade	1/4	1/-	Fakenham	1/3	11½	Market Harborough	1/5½	1/1½	Tewkesbury	1/5*	1/0½
Billericay	1/4	1/-	Falmouth	1/5	1/0½	Matlock	1/5	1/0½	Thetford	1/3	11½
Birchington	1/4	1/-	Fareham	1/4	1/-	Melton-Constable	1/2½	11	Thorpe Bay	1/6	1/1½
Birkenhead	1/8‡	1/3½	Faversham	1/3½	11½	Melton Mowbray	1/5½	1/1½	Todmorden	1/6½	1/2
Birmingham	1/6½	1/2	Felixstowe	1/5	1/0½	Merthyr Tydfil	1/6	1/1½	Tonbridge	1/5	1/0½
Bishop Auckland	1/6	1/1½	Filey	1/5	1/0½	Middlesbrough	1/6½	1/2	Torquay	1/6	1/1½
Bishops Stortford	1/5	1/0½	Fleetwood	1/6½	1/2	Middleton	1/6½	1/2	Totnes	1/4½†	1/0½
Blackburn	1/6½	1/2	Flint	1/6	1/1½	Middlewich	1/5½	1/1½	Trowbridge	1/3½*	11½
Blackpool	1/6½	1/2	Folkestone	1/4	1/-	Milford Haven	1/4½	1/0½	Truro	1/3½	11½
Blyth	1/6½	1/2	Frinton-on-Sea	1/4½	1/0½	Morecambe	1/6½	1/2	Tunbridge Wells	1/5	1/0½
Bognor Regis	1/4	1/-	Frome	1/3½*	11½	Morley	1/6½	1/2	Uppingham	1/5	1/0½
Bolton	1/6½	1/2	Gainsborough	1/5½	1/1½	Mundesley	1/3½	11½	Uttoxeter	1/5	1/0½
Bournemouth	1/5½	1/1½	Gateshead	1/6½	1/2	Nantwich	1/5½	1/1½	Wakefield	1/6½	1/2
Bracknell	1/4	1/-	Gillingham	1/5	1/0½	Newark-on-Trent	1/5½	1/1½	Walsall	1/6½	1/2
Bradford	1/6½	1/2	Glossop	1/6½	1/2	Newbury	1/4	1/-	Walsden	1/6½	1/2
Bradford-on-Avon	1/3½*	11½	Gloucester	1/5½†	1/1½	Newcastle-on-Tyne	1/6½	1/2	Walton-on-Naze	1/4½	1/0½
Braintree	1/4½	1/0½	Godalming	1/4½	1/0½	Newcastle-u-Lyme	1/6½	1/2	Ware	1/5½	1/1½
Brentwood	1/6	1/1½	Goole	1/6½	1/2	New Forest	1/3½	11½	Warminster	1/3½*	11½
Bridgwater	1/4½	1/0½	Gosport	1/5½	1/1½	Newmarket	1/4½	1/0½	Warrington	1/6½	1/2
Bridlington	1/6	1/1½	Grantham	1/5	1/0½	Newport, Mon.	1/6½	1/2	Warwick	1/6	1/1½
Brighouse	1/6½	1/2	Gravesend	1/6	1/1½	Newport Pagnell	1/3½	11½	Wellingborough	1/6	1/1½
Brighton	1/5½	1/1½	Gt. Yarmouth	1/4½	1/0½	Northampton	1/6½	1/2	Wells (Norfolk)	1/2½	11
Bristol	1/6½	1/2	Grimsby	1/6½	1/2	Norwich	1/6	1/1½	Welwyn	1/5½	1/1½
Broadstairs	1/4	1/-	Guildford	1/4½	1/0½	Nottingham	1/6½	1/2	Welwyn Gar. City	1/6½	1/2
Bromsgrove	1/5½	1/1½	Guilsborough	1/5	1/0½	Nuneaton	1/6½	1/2	West Bromwich	1/6½	1/2
Buckley	1/6½	1/2	Halifax	1/6½	1/2	Oakham	1/5	1/0½	Westcliff-on-Sea	1/6	1/1½
Bungay	1/2½	11	Hanley	1/6½	1/2	Oldham	1/6½	1/2	Weston-super-Mare	1/5½	1/1½
Burnham-on-Crouch	1/5	11½	Harpenden	1/5	1/0½	Ormskirk	1/6½	1/2	Weybridge	1/5	1/0½
Burnley	1/6½	1/2	Harrogate	1/6½	1/2	Oxford	1/6	1/1½	Weymouth	1/4*	1/-
Burslem	1/6½	1/2	Hartlepools	1/6½	1/2	Oxted	1/3½	11½	Whitby	1/5½	1/1½
Burton-on-Trent	1/6½	1/2	Harwich	1/4½	1/0½	Paignton	1/6	1/1½	Whitstable	1/4	1/-
Bury	1/6½	1/2	Haslemere	1/3½	11½	Peterborough	1/6	1/1½	Widnes	1/6½	1/2
Bury St. Edmunds	1/4	1/-	Hastings	1/4	1/0	Plymouth	1/6½†	1/2	Wigan	1/6½	1/2
Buxton	1/6	1/1½	Hatfield	1/5½	1/1½	Pontypridd	1/6	1/1½	Wigton	1/5	1/0½
Byfleet	1/4½	1/0½	Haywards Heath	1/4½	1/0½	Portsmouth	1/5½	1/1½	Willington	1/6	1/1½
Cambridge	1/6	1/1½	Hednesford	1/6	1/1½	Port Talbot	1/6½	1/2	Wilmslow	1/6½	1/2
Canterbury	1/4	1/-	Hemel Hempstead	1/5½	1/1½	Preston	1/6½	1/2	Winchester	1/4½	1/0½
Cardiff	1/6½	1/2	Henley	1/4½	1/0½	Pulborough	1/3	11½	Windermere	1/5	1/0½
Carlisle	1/6½	1/2	Hereford	1/4½*	1/0½	Ramsgate	1/4	1/-	Windsor	1/5½	1/1½
Carnforth	1/6½	1/2	Herne Bay	1/4	1/0	Reading	1/5½	1/1½	Wisbech	1/3½	11½
Castleford	1/6½	1/2	Hertford	1/5½	1/1½	Redditch	1/5½	1/1½	Witham	1/4½	1/0½
Caterham	1/5	1/0½	Heysham	1/6½	1/2	Redhill	1/4½	1/0½	Woking	1/4½	1/0½
Chard	1/3½*	11½	Hitchin	1/5	1/0½	Reigate	1/4½	1/0½	Wokingham	1/4½	1/0½
Chatham	1/5	1/0½	Hoddesdon	1/5½	1/1½	Retford	1/5	1/0½	Wolverhampton	1/6½	1/2
Chelmsford	1/5	1/0½	Holt	1/2½	11	Rickmansworth	1/6	1/1½	Woodbridge	1/3½	11½
Cheltenham	1/5	1/0½	Horley	1/4	1/-	Ripon	1/5	1/0½	Worcester	1/5½	1/1½
Chepstow	1/5½	1/1½	Horsham	1/4	1/-	Rochdale	1/6½	1/2	Workington	1/5	1/0½
Chertsey	1/5	1/0½	Horwich	1/6½	1/2	Rochester	1/5	1/0½	Worksop	1/5½	1/1½
Chester	1/6½	1/2	Huddersfield	1/6½	1/2	Rugby	1/6½	1/2	Worthing	1/4	1/-
Chesterfield	1/6½	1/2	Hull	1/6½	1/2	Saffron Walden	1/3	11½	Wrexham	1/6	1/1½
Chichester	1/4	1/-	Hunstanton	1/3	11½	St. Albans	1/6	1/1½	Wroxham	1/4	1/-
Chorley	1/6½	1/2	Huntingdon	1/3½	11½	St. Helens	1/6½	1/2	Wycombe	1/5	1/0½
Cirencester	1/4*	1/-	Ilfracombe	1/4½	1/0½	St. Neots	1/3½	11½	Wymondham	1/3	11½
Clacton	1/4½	1/0½	Ingatestone	1/4½	1/0½	Salisbury City	1/3½*	11½	Yeovil	1/4½*	1/0½
Clevedon	1/6½	1/2	Ipswich	1/5½	1/1½	Salisbury Plain	1/3½*	11½	York	1/6½	1/2

* Painters 1d. less than other Craftsmen. † Painters ½d. less than other Craftsmen. ‡ Plasterers 1/9.

For Building Trade Wages in Scotland see page 667.

TECHNICALIA

Practical Hints on Patents. By M. E. J. Gheury de Bray. London: The Imperial Patent Service, First Avenue House, High Holborn, W.C.1. Fourth edition. Price 1s. net.

This little "pocket guide" should be helpful in providing information on Patent Law and on the procedure necessary to patent an invention. The author is a patent agent and the subject is dealt with concisely and clearly.

Military Engineering. Vol. III, Part 1. Bridging. H.M. Stationery Office. Price 5s. 6d.

This book deals with bridging entirely from a military point of view, and with the usual stores available to the army on active service. Some of the suggestions might possibly be of use to a civilian engaged on a survey or on temporary works abroad. Military engineering is, of course, very different from civil engineering, and for that reason the book is of little use to the civil engineer, but indispensable to the military engineer, who is given herein formulæ and diagrams to assist rapid work in the field when there is little time for calculations and a limited choice of materials is available.

Design in Woodwork. By Percy A. Wells. London: B. T. Batsford. Price 6s. net.

This is a practical volume by a practical man. It contains illustrations of what may be termed articles of furniture of simple design and of practical and utilitarian character for every-day use. The designs are illustrated by working drawings showing methods of construction, jointing, etc., and details of mouldings, all of which are a useful guide to the woodworker. Often what might have been a good piece of simple furniture is spoilt by characterless mouldings. Some 70 photographic reproductions show the finished article, which enables the worker to know what he is aiming at. The volume also contains graded courses suitable for schools, training colleges, and evening classes.

Light Buildings. For the use of Architects, Builders, Maintenance Engineers, Works Managers, Farmers, Foremen, etc. By Edgar Lucas, Registered Architect. London: The Technical Press, Ltd., 5, Ave Maria-lane, Ludgate Hill, E.C.4. Price 7s. 6d. net.

The architect's chief interest is in the structure built to last. The occasion arises, however, when the quality of permanence is not demanded and when the alternative is something cheap and temporary. That such structures need not be unsightly shacks is clearly shown in Mr. Lucas's text-book, which contains many examples of quite architectural character. The full details of construction are clearly presented, and the book is a useful work of reference upon a subject generally and perhaps naturally brushed aside when dealing with building construction in general.

The Use of Photographs in Town Planning and Design. By Percy J. Waldram, F.S.I., and J. M. Waldram, B.Sc., F.Inst.P. Reprinted from the Journal of the R.I.B.A., 1934. London: P. S. King & Sons, Ltd., 14, Great Smith-street, Westminster, S.W.1. Price 2s. 6d.

This paper has been prepared with the thoroughness and scientific knowledge which we have learnt to expect from the authors. It has been logically built up from first principles, in which the science of perspective takes a first and important place.

Most architects have the general idea of perspective fairly firmly rooted in their minds, but there are many little points in Mr. Waldram's notes which call attention to matters not always understood. Particularly is this the case with the notes upon "vertical vanishing points." There are quite a number of perspective artists who are under the false impression that a slight vanishing of vertical lines is an expression of scientific truth improving the effect of their sketches. Actually, as Mr. Waldram points out, the vertical line vanishes only at infinity, and is thus expressed by parallel verticals. The tendency to vanish, noticeable in some photographs, is due to tilting of the camera, and however slightly the upward line is tilted, a definite vanishing tendency at once appears.

The notes upon measurements from photographs is of great value to the architect and surveyor. In a rough-and-ready way, many surveyors check the probability of their surveys by a comparison with photographs. Mr. Waldram shows how this comparison can be made an exact and scientific check. Another valuable contribution to technical information is the portion dealing with camera mounting whereby identical view-points can be exactly determined after photographic conditions have changed. The application of this to questions of rights of light, etc., is obvious.

Very interesting, also, is the series of diagrammatic impositions upon photographs showing the effect of high building upon certain London views.

Hot Water and Steam Supply by Electricity. By Frank C. Smith. London: E. and F. N. Spon, Ltd. Price 7s. 6d. net.

The advance made in the last few years in the practice of hot water and steam supply has been very rapid. Who, for instance, among ordinary practitioners a short time ago knew that by lagging a ¾ in. diameter smooth copper pipe operating at medium temperatures, heat losses might be increased? Yet the author, in the course of his exposition, makes use of this as an illustration, and in many kindred matters gives the reader a good deal to think about. The work, which is written by one having practical knowledge of his subject, is essentially one for the advanced student, though much that is within common knowledge is restated.

Sutton and Shannon on Contracts. Being a Fourth Edition of Pease and Latter's Students' Summary of the Law of Contracts. By Ralph Sutton, M.A., of Lincoln's Inn, Barrister-at-Law, and N. P. Shannon, of Gray's Inn, Barrister-at-Law. London: Butterworth & Co. Price 12s. 6d. net.

This little work was prepared originally in 1909 by the late Mr. Pease and Mr. Latter for the use of students preparing for call to the Bar or admission as solicitors, Mr. Pease being Assistant Reader in Common Law to the Council of Legal Education, and Mr. Latter Reader to the Law Society. A second edition under the same authorship appeared in 1913, and a third in 1925 under the authorship of Mr. Pease and Mr. Landon, Barrister-at-Law, etc., and Tutor of the Law Society. Mr. Sutton, one of the authors of the present edition, is Reader in Common Law to the Council of Legal Education, and therefore like the previous authors well versed in the requirements of students.

The present authors in their preface state that they have reconsidered the whole of the work, and that the result of this reconsideration has in their judgment emphasised the value of the work of Mr. Pease and those associated with him, but that they have not shrunk from the responsibility of revising or even rewriting any part of the book where such a course appeared desirable in view of the purposes of the work, or by reason of any new light thrown upon any topic by recent decisions; and in especial they have rewritten the introduction, and those articles which deal with mistake as affecting contract by reason of the decision in the House of Lords in the case Bell *v.* Lever Brothers.

So far as we have been able to examine it, the work appears to have been done well, and in the form in which this work is produced, with Tables of Cases and Statutes and an index, the text being illustrated with examples with sidenote references to the cases cited, it has all the features of a text-book for practitioners, and thus may, we think, even appeal to a larger public than the students for whom it is intended and for whose use it is also adapted, and by whom former editions have been found of service.

CONTRACTS OPEN

For some contracts still open, but not included in this list, see previous issues. Those with an asterisk are advertised in this number. Certain conditions beyond those given in the following information are imposed in some cases, such as that advertisers do not bind themselves to accept the lowest or any tender, that a fair wages clause shall be observed, that no allowance will be made for tenders, and that deposits are returned on receipt of a bona-fide tender, unless stated to the contrary.

The date given is the latest date when the tender or the names of those willing to submit tenders, may be sent in, the name and address at the end is the person from whom or place where quantities, forms of tender, etc., may be obtained.

Following is a list of abbreviations: Borough Surveyor, B.S.; Borough Engineer, B.E.; District Surveyor, D.S.; Town Clerk, T.C.; County Engineer, C.E.; County Surveyor, C.S.; Surveyor, S.; Engineer, E.

BUILDING, PAINTING, ELECTRIC LIGHTING, HEATING, etc.

OCTOBER 5.

Aberystwyth.—Erection.—Of block of flats adjacent to Greenfield-st., for T.C. B.S. Dep. £1 1s.

Atherstone.—Nurses' Quarters.—At Isolation Hospital, Grendon, for R.D.C. E. and S. Dep. £1 1s.

Atherstone.—Painting.—Of 135 houses in Atherstone and Polesworth, for R.D.C. E. and S.

Beckenham.—Erection.—Of cycle sheds and enclosures to verandah and covered ways at Hawes Down school, for B.C. T.C. Dep. £1 1s.

Blackpool.—Market.—In East Topping-st. and King-st., for T.C. B.S. Dep. £2.

Bradford.—External Painting.—Various schools, for E.C. City Architect.

Carrick-on-Suir.—Houses.—12 houses at Carrickbeg, for U.D.C. M. A. Veale, T.C. Dep. £3 3s.

Colchester.—External Painting.—To town hall, for T.C. Harold Collins, B.E.

Dumfries.—Houses.—34, at Nithside, for T.C. R. S. Osborne, B.S.

Dumfries.—Housing.—15 houses at Huntingdon, for T.C. R. S. Osborne, B.S.

Durham.—Additions.—And alterations to New Silksworth School, for C.C. F. Willey, F.R.I.B.A., 34, Old Elvet.

***Elham.**—Erection.—Of Council offices at Eastbrook, Lyminge, for R.D.C. J. L. Seaton Dahl, F.R.I.B.A., Radnor-chambs., Folkestone. Dep. £2 2s.

Faringdon.—Provision.—Of bathrooms to 22 houses in Station-rd., for R.D.C. J. W. Harris, Willesleigh, East Challow.

Fife.—Erection.—Of 68 houses at Crosshill, Lochore, and 84, at Rosewell, Lochore, for Fife C.C. W. Williamson & Hubbard, architects, Royal Bank-bldgs., Kirkcaldy. Dep. £1 1s.

Hanwell.—Erection.—Of sports pavilion in playing fields of Drayton Manor County School in Greenford-av., for Middlesex C.C. Secretary to the Education Committee, 10, Great George-st., London, S.W.1. Dep. £2 2s.

Irthlingborough.—Erection.—Of 4 parlour type four-bedroom, and 8 non-parlour type three-bedroom houses on Allen-rd. Estate, for U.D.C. E. Turnbull, S., High-st.

Leeds.—Extension.—Of store room and erection of steward's office at Killingbeck sanatorium, for T.C. J. Johnstone Jervis, Medical Officer of Health, 12, Market-bldgs., Vicar-ln.

Manchester.—Erection.—Of 142 flats, at Woodland-rd., Cheetham, for T.C. T.C. Dep. £2 2s.

Manchester.—Internal Painting.—At I.R.O. Sunlight House, for H.M.O.W. Room 65D, Third Floor, H.M. Office of Works, London, W.C.1. Dep. £1.

Meriden.—Painting.—Of houses at various sites, for R.D.C. H. Pickering, E. and S., Town Hall, Coleshill, Birmingham.

Norwich.—Demolition.—Of buildings in Osborne's-yd., etc., Oak-st., for T.C. City E.

Oswestry.—Erection.—Of 26 houses on Llwyn Farm estate, for T.C. S. Fox-Davies, Memorial Hall. Dep. £2 2s.

Slough.—Installation.—Of electric light in 148 houses at Langley, for U.D.C. Housing Manager.

Wembley.—Repairs.—And decorations to cottage isolation hospital and disinfecting station, Alperton-ln., for U.D.C. Treasurer and Accountant, 117a, High-rd. Dep. £1 1s.

West Ham.—Removal.—Of galleries at various schools, for C.B. J. H. Jacues, F.R.I.B.A., 61, West Ham-la., E.15. Dep. £1.

York.—Bungalow.—At municipal aerodrome, and additions to Theatre Royal, for T.C. Chas. J Minter, City E. Dep. £1 1s.

OCTOBER 6.

Aldershot.—Erection.—Of mortuary in police station yard, for T.C. T.C. Dep. £1 1s.

Arnold.—Extensions.—To Arno Vale school, for Nottinghamshire C.C. County Architect, Shire Hall, Nottingham. Dep. £1 1s.

Ballyhea.—School.—For Commissioners of Public Works, T. Cassedy, secretary, Office of Public Works, Dublin. Dep. £1.

Balrothery.—Fencing.—Ditch and mound fencing to enclose labourers' plots, for Dublin Board of Public Health. F. P. Russell, E., 6, Parnell-sq., Dublin.

Barrow-in-Furness.—Institute.—And junior instruction centre in Abbey-rd., for T.C. B.E.

Dublin.—Cottages.—65, in South County Dublin, for Board of Public Health. T. B. Byrne, E., 6, Parnell-sq. Dep. £1 1s.

Dublin.—Cottages.—21, on various sites in Balrothery district, for Board of Public Health. F. P. Russell, B., 6, Parnell-sq. Dep. £2 2s.

Coole.—Houses.—50 A type, on Morley-st. and Mount Pleasant sites and another site, and separate tenders for painting and electrical work, for T.C. J. H. Castle, B.E. Dep. £3 3s.

London. — Alteration. — And completion of day nursery and sun clinic in Scholefield-rd., for Islington B.C. E. C. P. Monson, F.R.I.B.A., 120, Moorgate, E.C.2. Dep. £3.

Newport (Mon.).—Erection.—Of post office garage and workshop, for H.M.O.W. Room 65D, Third Floor, H.M. Office of Works, London, S.W.1. Dep. £1.

Newton Abbot.—Houses.—86, for R.D.C. A. E. Smith, Housing Surveyor, Midland Bank-chambs., Union-st.

Sales. — Erection. — Of Oakengate employment exchange, for H.M.O.W. Room 65D, Third Floor, H.M. Office of Works, London, S.W.1. Dep. £1.

Worcester.—Houses.—32 semi-detached three-bedroom type and 8 semi-detached four-bedroom type, also roads and sewers, at Blackpole-rd., for T.C. City E.

OCTOBER 7.

Birmingham.—Lavatories.—At Lodge Hill and Yardley cemeteries, and at Morden-rd. and Haselwell recreation grounds, for T.C. General Manager, Parks and Cemeteries Department, 161, Corporation-st. Dep. £2 2s.

Bradford.—Transforming Station.—In Thorn-ln., Bingley-rd., for T.C. T. Roles, City Electrical E. and Manager, 45 to 53, Sunbridge-rd. Dep. £1 1s.

Brighton.—Houses.—18, in Carden-av., Patcham, for T.C. E. and S. Dep. £2 2s.

***Bristol.**—Additions.—To Fonthill-rd. school, Southmead, for T.C. Bernard & Son, 26, Orchard-st. Dep. £2 2s.

Dagenham.—Erection.—Of fire station at New Civic, for U.D.C. Clerk. Dep. £5 5s.

Huddersfield.—Demolition.—Pulling down of buildings and clearance of site of Thomas-st. clearance area, for C.B. B.E.

Leyton. — Erection. — Of employment exchange, for H.M.O.W. Room 65D, Third Floor, H.M. Office of Works, London, S.W.1. Dep. £1.

Luton.—School.—For juniors and infants at Beechwood-rd., for T.C. W. H. Robinson, T.C. Dep. £5.

Monaghan.—Houses.—26, for U.D.C. Frank Gibney, architect, 16, Westmoreland-st., Dublin. Dep. £5 5s.

Northallerton. — External Repainting. — Of 44 houses, Vicar's Croft housing estate, also Isolation Hospital, caretaker's house and other buildings at Sewage Works, for U.D.C. H. Evans, Clerk.

Poole.—Erection.—Of senior school at Rossmore, Parkstone, for T.C. B.E. Dep. £5 5s.

Romsey.—Reconditioning Works.—To 6 houses, for T.C. B.S.

Stoke-on-Trent.—Sub-station.—At Townsend, Bucknall, for T.C. A. Cotton, Sons & Hulme, architects, Piccadilly, Tunstall. Dep. £2.

Totnes.—Repairs.—Internal repairs and renovations, new invatories, etc., at public assistance institution, for Devon C.C. H. V. de Courcy Hague, F.R.I.B.A., County Architect, 97, Heavitree-rd., Exeter.

Watford.—Erection.—Of 120 houses on Leavesden Green estate, for T.C. B.E. Dep. £2 2s.

West Drayton. — Erection. — Of telephone exchange, for H.M.O.W. Room 65D, Third Floor, H.M. Office of Works, London, S.W.1. Dep. £1.

Whitchurch (Glam.).—Painting.—And renovation work to free library, for P.C. Morgan Rowlands, clerk, Council Office, Bishops-rd.

OCTOBER 8.

***Cambridge.**—Erection.—Of new male block at county infirmary, Mill-rd., for C.C. County Architect. Dep. £2 2s.

Dartford.—Extension.—To public library building in Market-st., for T.C. T.C. Dep. £2 2s.

Dursley. — Erection. — Of 12 houses at Wotton-under-Edge, for R.D.C. Clerk. Dep. £1 1s.

Harworth, Bircotes.—Teacher's House.—For Nottinghamshire C.C. County Architect, Shire Hall, Nottingham. Dep. £1 1s.

Kingsgrove.—Exterior Painting.—Of 52 houses on Woodshutts estate, for U.D.C. H. W. Crowther-Green, E. and S.

Stroud.—External Painting.—Of 48 houses, for R.D.C. W. J. Stimpson, L.R.I.B.A., Council Offices, Frindsbury Hill. Dep. £1 1s.

***West Ham.**—Installation.—Of electric lighting and hot water heating apparatus at Fyfield residential open-air school near Ongar, for C.B. J. H. Jacques, F.R.I.B.A., 61, West Ham-ln., Stratford, E.15. Dep. £1.

Wroxham.—Police House.—For Norfolk C.C. County Architect, 23, Thorpe-rd., Norwich.

Yeovil.—Houses.—12, at Stoke-under-Ham, for R.D.C. Peter Warren and Roydon Cooper, F/A.R.I.B.A., Old Sarum.

OCTOBER 9.

Bramley.—Transformer Sub-station.—At Warner-rd., for T.C. W. G. Trend, B. Electrical E., West-st. Dep. £1.

Flaxton.—Houses.—3, at Flaxton, for R.D.C. L. Parker, S. Dep. £1 1s.

Huddersfield.—Houses.—180, on Deighton-Sheepridge housing estate, for C.B. B.E. Dep. £3 3s.

***South Petherton.**—Erection.—Of isolation hospital, for South Somerset Joint Hospital Board. Clerk, Church House, Yeovil. Dep. £3 3s.

***Spalding.**—New Cattle Market.—For U.D.C. W. E. Norman Webster, F.R.I.B.A., 1a, Station-rd Dep. £2 2s.

Stoke, St. Mewan.—Police House.—For Cornwall C.C. S. Pool, A.R.I.B.A., County Hall, Truro. Dep. £1.

OCTOBER 10.

Bristol. — Erection. — Of 95 houses on Knowle East site and 30 on Horfield site, for T.C. City E. Dep. £1.

***Epsom.**—Erection.—Of 12 houses and 8 flats in Hook-rd., for U.D.C. Williams, Pettett & Gardner, L/F.R.I.B.A., Ashley-rd. Dep. £3 3s.

***Hereford.**—Structural Alterations.—And additions to hospital block at Ross Public Assistance Institution, for C.C. Clerk. Dep. £2 2s.

Hindley.—Painting.—Of houses on Atherton-rd. housing site, Hindley Green, for U.D.C. O. P. Abbott, S. Dep. £1 1s.

Ireland.—Houses.—2, and 2 out-offices at Mayo, and 14, and 14 out-offices at Kildare, for Irish Land Commission. M. Deegan, secretary, Upper Merrion-st., Dublin. Dep. £1.

Leeds.—Painting.—And cleaning at City Hospitals, Seacroft, for T.C. J. J. Jervis, Medical Officer of Health, Public Health Dept., 12, Market-bldgs., Vicar-ln.

Lewes. — Erection. — Of 28 houses at Winterbourne-ln., for T.C. T.S. Dep. £2 2s.

Liverpool.—Dressing Boxes.—For Westminster-rd. baths, for T.C. Land Steward and S.

Pudsey.—Alterations.—And renovations at grammar school. Herbert Feather, Director of Education, Education Offices, Pudsey.

Walthamstow.—Interior Painting.—Of Chapel End schools, for B.C. Frank H. Heaven, A.R.I.B.A., Old Monoux-bldgs., E.17.

Witney.—Houses.—16, and appurtenant works at Dark-ln., for U.D.C. A. T. Green, S. Dep. £2 2s

OCTOBER 12.

Chiswick. — Conversion. — Of marketing building and Linden House, High-rd., into fire station, with district officer's and men's quarters, for Brentford and Chiswick B.C. B.E. and S. Dep. £5 5s.

Halifax.—Joiner's Work.—At 330 houses and 50 bungalows, Park Lodge estate; also slater's work at 30 houses, Sandbeds Farm, for T.C. D. T. Lloyd Jones, B.E., Crossley-st. Dep. £2 2s.

Harrow.—Operating Room.—At Isolation Hospital, Rayners-la., for U.D.C. Clerk, Council Offices, Stanmore. Dep. £1.

***Hounslow.**—Erection.—Of infants' school, at Heath-rd., for Heston and Isleworth B.C. B.S. Dep. £2 2s.

***Hove.**—Erection.—Of hall at Connaught-rd. school, for E.C. Secretary. Dep. £2 2s.

Kingsbridge.—Police Station.—For Devon C.C. H. V. de Courcy Hague, F.R.I.B.A., County Architect, 97, Heavitree-rd., Exeter. Dep. £2 2s.

Newcastle-upon-Tyne.—Extensions.—To City Engineer's drawing office, town hall, for T.C. City Estate and Property Surveyor.

Newmarket. — Erection. — Of 32 houses and 8 bungalows, for R.D.C. S. Dep. £1 1s.

Preston.—Wiring.—At Institution, Fulwood, for T.C. B.S. Dep. £2 2s.

Standish-with-Langtree.—Houses.—116, on Avondale site, for U.D.C. S. Dep. £3 3s.

Stockport.—Shelters.—On Wellington-rd. North, at Belmont Bridge, for T.C. B.S.

Talgarreg.—Classroom.—Sanitary offices for boys and girls and improvements at school, for Cardiganshire C.C. Rhys Jones, F.R.I.B.A., County Architect, Llandyssul. Dep. £3.

Tregroes.—Shelter.—At school, for Cardiganshire C.C. H. J. Lewis, Director of Education, 56, Portland-st.

Walsall.—Sub-stations.—2, for Electric Supply Dept. E. A. Newburn, E. and Manager, Upper Bridge-st.

Ware.—Houses.—32, at Vineyard estate, for U.D.C. R. W. Grantham, E. and S., The Priory. Dep. £2 2s.

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OCTOBER 13.

Beckenham (Kent).—Conversion.—And extension to existing building as engine house, etc., at Shortlands pumping station, Valley-rd., for Metropolitan Water Board. Chief Engineer, 173, Rosebery-av., E.C.1. Dep. £10.

Brentford. — Erection. — Of 32 cottage flats on site of Holly House, Boston Manor-rd., for Brentford and Chiswick B.C. B.E. and S., Chiswick. Dep. £5 5s.

Doncaster.—Houses.—58, at Wheatley Park, for T.C. B.E. Dep. £5 5s.

Dublin.—School.—At Harold's Cross, Morris & Kavanagh, 68, Harcourt-st. Dep. £3 3s.

Swadlincote.—Repairs.—At 50-62, Common-rd., Church Gresley, for U.D.C. Sanitary Inspector.

Tiverton.—Conveniences.—At Higher Mill-ln., Culompton, for R.D.C. A. J. Dennis, Sanitary S., 25, St. Peter-st.

Wellingborough.—Houses.—72, at Eastfield-cres., Finedon Ward, for U.D.C. E. Dep. £1 1s.

West Ham.—Residence.—For senior medical officer at central home, Union-rd., Leytonstone, E.11, for T.C. B.E., Town Hall, West Ham, E.15. Dep. £1.

Winchester.—Alterations.—To police station, for T.C. H. S. Sawyer, F.R.I.B.A., Queen Anne's-chams. Dep. 10s. 6d.

OCTOBER 14.

Carshalton. — Conveniences. — At Green-la., Rose hill, and The Wrythe recreation ground, Wrythe-la., for U.D.C. Reginald S. Davey, E. and S., Stone Court, The Grove. Dep. £2 2s.

Chertsey. — Erection. — Of mortuary and other works in Fordwater-rd., for U.D.C. Clerk. Dep. £1 1s.

Crook.—Houses.—128, at Roddymoor, for North Eastern Housing Association, Ltd. George R. Smith & Partners, architects, 3, Winchester-st., South Shields. Dep. £3 3s.

Manchester.—Foundation Work.—At employment exchange, for H.M.O.W. H.M. Office of Works, 76, Newton-st., Manchester. Dep. £1.

Nottingham.—Internal Cleaning.—And painting at various schools, for T.C. A. H. Whipple, Director of Education, Education Offices, South-parade. Dep. £1 each contract.

Orpington.—Internal.—And external decorating, repairs, etc., to certain houses, for U.D.C. C. R. Pascoe.

Portsmouth. — Alterations. — And additions to Omega-st. school, for T.C. Adrien J. Sharp, L.R.I.B.A. Dep. £2 2s.

***Southend-on-Sea.**—Erection.—Of secondary school on Earls Hall site, for C.B. F. W. Smith, architect, Municipal-bldgs. Dep. £2.

***Welwyn Garden City.**—Erection.—Of 110 houses and 8 flats for aged persons, for U.D.C. Clerk. Dep. £2 2s.

OCTOBER 15.

Altrincham.—Houses.—38, in Craven-rd., for U.D.C. H. E. Brown, S. Dep. £2 2s.

St. Pancras.—Reconstruction.—Of underground convenience at junction of Park-st. and High-st., Camden Town, for B.C. B.E. and S., Town Hall, Pancras-rd., London, N.W.1. Dep. £2 2s.

***Wallasey.**—Erection.—Of branch library, Wallasey Village, for C.B. T.C. Dep. £2 2s.

***West Ham.**—Construction.—Of open-air bath, etc., at Beckton-rd. dressing rooms, Canning Town, for C.B. B.E. Dep. £1.

OCTOBER 16.

Dublin.—Erection.—Of 168 flat dwellings and 12 shops on Townsend-st. site, for T.C. City Treasurer, Exchange-bldgs., Lord Edward-st. Dep. £5 5s.

***Ealing.**—Erection.—Of 32 houses at Northolt, for B.C. B.E. Dep. £1.

OCTOBER 17.

Bebington.—Conveniences.—At Bromborough, for U.D.C. L. Birch, E. and S., Brackenwood, Higher Bebington. Dep. £1 1s.

St. Alban.—Refreshment Chalet.—At Verulamium, for T.C. F. T. Negus, City E. and S., 38, St. Peter's-st. Dep. £1 1s.

OCTOBER 19.

East Grinstead.—Houses.—48, at Sackville estate, Sackville-ln., for U.D.C. E. and S. Dep. £2 2s.

Epsom and Ewell. — Construction. — Of 2 new entrances, and alterations to Ashley-rd. Lodge at Cemetery, Epsom, for U.D.C. N. Auty, E. and S., Town Hall, The Parade, Epsom. Dep. £1 1s. each contract.

Great Crosby.—Lavatories.—At playing fields, off Moorside-rd., for U.D.C. Joseph A. Wright, S., Town Hall. Dep. £1 1s.

London.—Erection.—Of workshops and central garage at Limehouse, for Stepney B.C. B.E. and S., Raine-st., E.1. Dep. £10.

Paignton.—Convenience.—And shelter, at Preston Green, for U.D.C. E. and S. Dep. £3 3s.

Port Talbot.—Alterations.—And additions to 18, Station-rd., for T.C. B.E.

Rothwell, Yorks.—Houses.—9, at Lofthouse housing estate, for U.D.C. F. Hartley, Council Offices, Rothwell, nr. Leeds.

Seaton Valley.—Alterations.—To 10 "Dorlonco" type houses on Castle-pk. housing estate, Backworth, for U.D.C. S., Shiremoor. Dep. £2 2s.

Watford. — Erection. — Of analytical laboratory etc., at Building Research Station, for H.M.O.W. Room 65D, Third Floor, H.M. Office of Works, London, S.W.1. Dep. £1.

OCTOBER 20.

Dagenham. — Construction. — Of open-air swimming bath and erection of administrative buildings and other works incidental thereto, at The Leys, Old Dagenham-pk., for U.D.C. F. C. Lloyd, E. and S. Dep. £5 5s.

OCTOBER 22.

Edinburgh.—Extension.—Of Portobello power station, for T.C. E. J. MacRae, F.R.I.B.A., City Architect, City-chams.

Malvern.—Extension.—Of public library, Graham-rd., for U.D.C. Clerk. Dep. £1 1s.

***Rainhill.**—Erection.—Of house for assistant medical officer. Clerk to Committee of Visitors, 49, Corporation-st. Dep. £1 1s.

***Watford.**—Erection.—Of Electricity Showrooms and Offices in High-st., for B.C. B.E. Dep. £2 2s.

OCTOBER 23.

***Chichester.**—Demolition.—Of certain buildings and erection of casual wards, single-story laundry, three cottages, stores, etc., at poor law institution, for West Sussex C.C. C. G. Stillman, F.R.I.B.A., Dep. £2 2s.

***Chichester.**—Electrical Lighting.—And power services for laundry at poor law institution, for West Sussex C.C. C. G. Stillman, F.R.I.B.A. Dep. £2 2s.

***Durham.**—Erection.—Of branch library at Haverton Hill-on-Tees, for C.C. F. Willey, F.R.I.B.A.

***Watford.**—Erection.—Of branch library, St Albans-rd., for B.C. B.E. Dep. £2 2s.

OCTOBER 24.

***Bexley.**—Erection.—Of child welfare centre, Murchison-av., for U.D.C. S. Dep. £2 2s.

OCTOBER 26.

***Bournemouth.**—Erection.—Of secondary school for boys at East Way, for C.B. B.E. Dep. £3 3s.

Great Yarmouth.—Houses.—30, at Lawn-ave., for T.C. B.E. Dep. £2 2s.

***Ilford.**—Erection.—Of branch public library at Gantshill Cross, for B.C. B.E. Dep. £3 3s.

OCTOBER 30.

***Sunderland.**—Erection.—Of (a) reception block, sick hospital and nurses' home, and (b) boiler house, outbuildings and site works at Borough Mental Hospital, Ryhope, for C.B. W. & T. R. Milburn, FF.R.I.B.A., 17, Fawcett-st. Dep. £2 2s.

NO DATE.

***Swansea.**—Rebuilding.—Of "Belle Vue Hotel," T. P. Jenkins, A.R.I.B.A., 43, Waterloo-st.

MATERIALS, etc.

OCTOBER 5.

Hartford.—Broken Granite.—For T.C. B.S.

OCTOBER 7.

Clacton.—Concrete Paving Flags.—For U.D.C. W. Aiston.

OCTOBER 8.

Southend-on-Sea.—Concrete Tubes.—For T.C. Robert H. Dyer, B.E. and S. Dep. £1.

OCTOBER 10.

Hampton.—Granite Kerb.—For U.D.C. Sidney H. Chambers, S.

Mexborough.—Road Materials.—For U.D.C. J. Chambers, S.

OCTOBER 12.

Broadstairs and St. Peter's.—Road Materials.—For U.D.C. S.

OCTOBER 19.

Chatham.—Granite Kerb.—For T.C. R. L. Honey, F.S.I., B.E. and S.

ENGINEERING, IRON AND STEEL.

OCTOBER 6.

Croydon.—Tanks.—Insulation of six reinforced concrete sludge digestion tanks, at Beddington Sewage Purification Works, for C.B. B.E. Dep. £1 1s

Warwickshire.—Construction.—Of Coleshill By-pass bridges and widening, strengthening and reconstruction of canal bridges, for C.C. L. Edgar Stephens, clerk, Shire Hall, Warwick. Dep. £5 each contract.

OCTOBER 9.

Ogwen.—Intake works.—At Marchlyn Mawr Lake, for R.D.C. Chas. F. Farrington, M.Inst.C.E., Trinity-sq., Llandudno. Dep. £5 5s.

OCTOBER 10.

Hawick.—Construction.—Of steel footbridge near Commonside, for Roxburgh C.C. County Road S., Newtown, St. Boswell.

OCTOBER 12.

Lancashire.—Widening.—And redecking of Farnworth (Widnes) station railway bridge, for C.C. C.S. and Bridgemaster, County Offices, Preston.

South Africa.—Steelwork.—For new station at Mayfair and Germiston-Elandsfontein deviation road bridge to carry main reef road over Pretoria lines at new Driefontein station, for South African Railways and Harbours Administration. Chief Stores Superintendent, Park Station-chambs., Rissik-st., Johannesburg.

OCTOBER 20.

Ipswich.—Construction.—Of 600 ft. long extension to Cliff Quay, for Dock Commissioners. Consulting Engineers, Sir Alexander Gibb & Partners, Queen Anne's Lodge, Westminster, S.W.1. Dep. £5 5s.

OCTOBER 22.

***Chichester.**—Provision.—And fixing laundry machinery and equipment, etc., at poor law institution, for West Sussex C.C. C. G. Stillman, F.R.I.B.A. Dep. £2 2s.

***Chichester.**—Provision.—And fixing of economic boilers and steel chimney at poor law institution, for West Sussex C.C. C. G. Stillman, F.R.I.B.A. Dep. £2 2s.

OCTOBER 26.

Straits Settlements.—Supply.—Of galvanised wrought-iron unsocketed tubes, for Department of Overseas Trade, 35, Old Queen-st., S.W.1. Ref. T.Y.30,682.

OCTOBER 27.

Derby.—Construction.—Of bridge, with incidental works, over L.M. & S. Rly. main Derby-Nottingham line and Derby Canal, for T.C. E. H. Bennett, B.E., 18, Tenant-st. Dep. £5 5s.

Grangemouth.—Constructing.—An electrically operated steel swing bridge at Junction Dock; electrically operated steel bascule bridge at Loch No. 2 (Forth and Clyde Canal); reconstructing roadway on South Bridge-st. and executing relative works, for T.C. Crouch & Hogg, engineers, 17, Lynedoch-st., Glasgow, C.3. Dep. £5 5s.

NOVEMBER 3.

India.—Bridge.—Seven spans of 105 feet for Nari Bridge, for the Director-General, India Store Department, Belvedere-rd., Lambeth, S.E.1.

NOVEMBER 9.

Singapore.—Supply.—Of malleable iron pipe fittings and miscellaneous special fittings, for Department of Overseas Trade, 35, Old Queen-st., S.W.1. Ref. T.30,699.

NOVEMBER 13.

Galway.—Development.—Breaking, dredging and disposal of rock and dredging and disposal of soft material; construction in tidal water of pier and shed upon it, and reconstruction within cofferdam of dock entrance, and provision of pair of dock gates, and various other works, for Harbour Commissioners. Sir Cyril Kirkpatrick & Partners, 25, Victoria-st., London, S.W.1. Dep. £25.

ROAD, SEWERAGE AND WATER WORKS.

OCTOBER 5.

Chipping Norton.—Laying.—Of cast-iron water mains, construction of reservoir, engine house and appurtenant works, for Steeple Barton and Westcot Barton water supply, for R.D.C. W. H. Bateman, E., Batheaston, Bath. Dep. £2 2s.

Cranbrook.—Extending.—Main sewer in Back-rd., Sandhurst, for R.D.C. J. H. Bailey, "Penryn."

Eastbourne.—Construction.—Of glazed stoneware pipe sewer and concrete pipe surface-water sewer, with manholes, etc., for T.C. B.E.

Formby.—Drainage Works.—In Barkfield-ave, for U.D.C. E. Kendrick Gollan, E. and S.

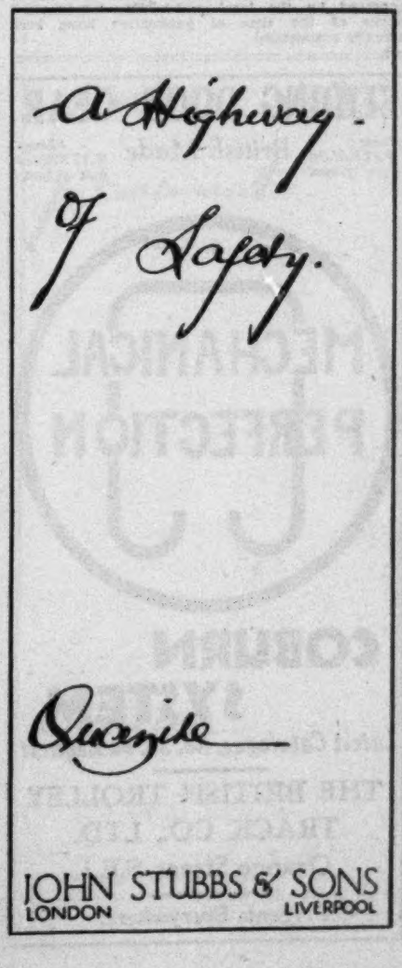
Kidderminster.—Construction.—Of cast-iron pipe water main and provision of fittings, with other contingent works, for Drakelow and Hobro water supply, for R.D.C. Piddian & Deeley, engineers, 13, Church-st., Stourbridge. Dep. £3 3s.

Kingswood.—Street Improvements Works.—For U.D.C. S. Dep. £2 2s.

Meriden.—Construction.—Of stoneware pipe sewers, with manholes and other incidental works, in Birmingham-rd. and Old Chester-rd., Coleshill, for R.D.C. H. Pickering, E. and S. Dep. £2 2s.

Stourbridge.—Construction.—Of about 940 yds. of 18-in. and 15-in. concrete pipe sewer from Enville-st. to Cemetery-rd., for Main Drainage Board. Geo. Plant Deeley, E., 13, Church-st. Dep. £2 2s.

Whitstable.—Making-up.—Of two roads, for U.D.C. G. Dunkin, S. and Water E.



OCTOBER 6.

Aldershot.—Making-up.—Of two streets, for T.C. James Neave, B.E. and S. Dep. £1 1s.

Carmarthenshire.—Improvement.—At Cana Chapel, Pass By, for C.C. T. W. Wishlade, C.S., The Castle, Carmarthen. Dep. £5.

Chislehurst and Sidcup.—Making-up.—Of Westwood-la, Sidcup, for U.D.C. Edgar Lawes, E. and S., Council Offices, Main-rd., Sidcup. Dep. £1 1s.

Hertford.—Water Supply Works.—For T.C. D. Balfour & Sons, consulting engineers, 47, Victoria-st., Westminster, S.W.1. Dep. £5.

Margate.—Construction.—Of new roads and sewers on Northdown estate, for T.C. E. C. Harris & Partners, quantity surveyors, 3, Bedford-sq., London, W.C.1. Dep. £2 2s.

Sidcup.—Making-up.—Of Westwood-la., for Chislehurst and Sidcup U.D.C. E. Lawes, Main-rd. Dep. £1 1s.

Wimbledon.—Supply.—And laying of approx. 3,100 yds. super. of 2-in. asphalt at Durnsford-rd., for T.C. B.E. and S.

OCTOBER 7.

Carlisle.—Laying.—Of sewers in Denton Holme, Currock, Upperby and Caldew Valley areas, and construction of pumping station, for T.C. City E., 18, Fisher-st. Dep. £3 3s.

Dunstable.—Construction.—Of stoneware pipe sewer, with manholes, in London-rd., for T.C. Wm. F. Wilkins, B.E. and S. Dep. £1 1s.

Horndean.—Kerbing.—Channelling and making-up of Drill Hall-rd. and St. Annes-rd., for Petersfield R.D.C., acting as agents for Southampton C.C. S. F. Warren, Road S. Dep. £1 1s.

Leicestershire.—Reconstruction.—Of London-Carlisle-rd., for C.C. C.S., County Offices, Grey Friars, Leicester. Dep. £5.

St. Neots.—Repairs.—To existing service reservoir, for C.C. John Taylor & Sons, engineers, Caxton House, Westminster, S.W.1. Dep. £2.

Southam.—Sewage Disposal Works.—For R.D.C. S. Douglas, E., 60, Priory-rd., Kenilworth. Dep. £3 3s.

OCTOBER 8.

Chepping Wycombe.—Making-up.—Of 5 roads, for T.C. T. J. Rushbrooke, B.S.

Leeds.—Kerbing.—Flagging and tarpaving footpaths and carriageways in various roads, for T.C. Highways E., 126, Kirkstall-rd. Dep. £1 1s.

Manchester.—Sewering.—Draining, excavating, kerbing, flagging and paving of various roads, for T.C. City E. Dep. £2 2s.

Scarborough.—Reconstruction.—Of Vernon-rd. and reconstruction of sewer, for T.C. J. Paton Watson, B. and Water E. Dep. £1 1s.

OCTOBER 9.

Ogwen.—Construction.—Of intake works at Marchlyn Mawr Lake, for R.D.C. Chas. F. Farrington, Trinity-sq., Llandudno. Dep. £5 5s.

Taunton.—Construction.—Of sewer, with syphons, etc., under River Tone, for T.C. I. F. Shellard, B.E. and S., St. Paul's House.

OCTOBER 10.

Argyll.—Road.—Contract No. 1, for Tyndrum-Oban road—route A. 85 (pass of Brander-Dallnamac section), length, 6.8 miles, for C.C. D. Smith and Duncan C. MacTavish, County Clerks, Lochgilphead. Dep. £3 3s.

Ecclesall.—Construction.—Of Winton outfall sewer, for T.C. T. Elce, B.E. Dep. £2 2s.

Louth.—Construction.—Of sewerage system for Dunleer, for Board of Health. J. F. McGahon & Son, architects, Exchange-bldgs., Dundalk. Dep. £5 5s.

Manchester.—Sewering.—Draining, paving, flagging of various streets, for T.C. Highways Dept., Town Hall. Dep. £1 1s.

Wantage.—Connecting.—Of 156 houses in certain parishes to water mains and providing drainage arrangements, for R.D.C. J. W. Harris, East Challow.—Dep. £1 1s.

Whitefield.—Reconstruction.—Of Bleakley, Thorp and Livsey-sts., for U.D.C. J. Knight, S., Town Hall. Dep. £1 1s.

Witney.—Laying.—Of 750 yds. of 6-in. stoneware pipe in New Yatt-rd., with manholes, etc., for U.D.C. A. T. Green, E. and S. Dep. £2 2s.

OCTOBER 12.

Eastbourne.—Construction.—Of glazed stoneware pipe sewer, together with concrete pipe sewer, manholes, junctions and incidental works, at Baldwin-ave., for T.C. B.E.

Litherland.—Construction.—Of sewer at Kirkstone-rd. North, for U.D.C. Geo. Ponsford, E. and S. Dep. £2 2s.

Sedbergh.—Construction.—Of sewage disposal works, for R.D.C. Fred J. Rodwell & Son, Prudential-bldgs., 20, Park-row, Leeds, 1. Dep. £3 3s.

Slough.—Making-up.—Of Quaves-rd., for U.D.C. Alan Bromly, E., Council Offices, 4, William-st.

Slough.—Construction.—Of service road, for U.D.C. Alan Bromly, E., Council Offices, 4, William-st.

Slough.—Laying.—Of glazed stoneware sewers, the construction of manholes, and other appurtenant works, for U.D.C. E.

Southampton.—Street Works.—In Quayside-rd., Bitterne; Bassett-close; and Stanton-rd., for T.C. B.E., Civic Centre. Dep. 1½ guineas.

OCTOBER 13.

Colwyn Bay.—Widening.—And reconstruction of Whitehall-rd., for T.C. W. J. Dunning, B.S.

Doncaster.—Construction.—Of roads and sewers on Glebe-la. estate, for Estates Dept., R. E. Ford, Estate S., 3, Priory-pl.

Doncaster.—Construction.—Of roads at Wheatley-pk., for T.C. B.E., 2, Priory-pl.

Frinton and Walton.—Reconstruction.—Of portion of Marine-parade, Walton-on-the-Naze, for U.D.C. H. W. Holmes, S. Dep. £2 2s.

Hornchurch.—Making-up.—Of Babington-rd., for U.D.C. Acting S.

Hornsturch.—Making-up.—Of Northumberland-av., Westmoreland-av. and Manor-av., for U.D.C. Acting S.

Lewisham.—Drainage Works.—At 64, 66 and 68, Wistaria-rd. and 27, Dermody-rd., for B.C. J. T. Duff, T.C., Town Hall, Catford, S.E.6.

Weymouth.—Making-up.—Of part of Weymouth Bay-ave., for T.C. B.S., 6, Pulteney-bldgs.

OCTOBER 15.

Littlehampton.—Reconstruction.—Of Maltravers-drive, for U.D.C. S. Dep. £2 2s.

Mantyglo and Blaina.—Construction.—Of cast-iron water main, for U.D.C. Sir Alexander Gibb & Partners, engineers, Queen Anne's Lodge, Westminster, S.W.1. Dep. £2 2s.

Peterborough.—Construction.—Of foul sewers in Foxcovert-rd. and Newborough-rd., Dogsthorpe, for T.C. City E.

Seaton Valley.—Laying.—Of sewer at East Cramlington, for U.D.C. S., Shiremoor, Northumberland. Dep. £2 2s.

Shepton Mallet.—Water Supply.—For Pilton and other parishes, for R.D.C. T. P. Jordan, E. Dep. £2 2s.

OCTOBER 16.

Walthamstow.—Making-up.—Of Fyfield-rd., for T.C. T. S. Cunningham, B.E. and S.

OCTOBER 17.

Henley-on-Thames.—Reconstruction.—Of unclassified roads, for T.C. T. L. G. Jefferies, B.S. Dep. £2.

OCTOBER 19.

East Grinstead.—Sewers.—At Sackville estate, for U.D.C. E. and S.

East Grinstead.—Road.—And footways to houses on Sackville estate, for U.D.C. E. and S.

Nottingham.—Pipelaying.—In Bingham district, for T.C. F. W. Davies, E. and General Manager, Water Department, Castle Boulevard. Dep. £3 3s.

Thurrock.—Surface Water Sewering.—Construction of carriageways, kerbing, paving and work incidental in various streets, for U.D.C. G. F. Andrassey, E.

OCTOBER 20.

Bristol.—Construction.—Of concrete tube sewer, for T.C. H. M. Webb, City E., 53, Queen-sq. Dep. £2.

Doncaster.—Construction.—Of sewers and surface-water drains at Balby and Warmsworth, for T.C. B.E., 2, Priory-pl. Dep. £5 5s.

Public Appointments.

OCTOBER 5.

Newcastle-upon-Tyne. — Architectural Assistant (Temp.).—For E.C. Director of Education.

OCTOBER 6.

***Gillingham.**—Clerk of Works.—For Kent E.C. County Clerk.

***Swansea.**—Assistant Quantity Surveyor.—For C.B. T.C.

OCTOBER 7.

Walthamstow.—Quantity Surveyor and Two Architectural Assistants (Temp.).—For B.C. Director of Education.

OCTOBER 8.

Rochdale.—Architectural Draughtsman (Temp).—For C.B. B.S.

OCTOBER 10.

Blackburn.—Three Architectural Assistants and one Assistant Quantity Surveyor.—For C.B. B. and Water Engineer.

***Guildford.**—Clerk of Works and Properties Assistant.—B.S.

***Maidenhead.**—Architectural Assistant (Temp.).—For T.C. T.C.

Norwich.—Two Architectural Assistants (Temp.) —For T.C. City Engineer.

OCTOBER 12.

***Cheshunt.**—Building Inspector.—For U.D.C. E. and S.

OCTOBER 14.

***Newcastle-upon-Tyne.**—Lecturer at Rutherford Technical College.—For E.C. Director of Education.

OCTOBER 16.

***Leeds.**—Assistant Clerk of Works.—For T.C. R. A. H. Livett, A.R.I.B.A.

***Leicester.**—Architectural Assistant.—For T.C. City E. and S.

***Sutton.**—Architectural Assistant.—For Sutton and Cheam T.C. T.C.

OCTOBER 17.

***Herefordshire.**—Architectural Assistant (Temp.). —For C.C. Clerk.

OCTOBER 19.

***London.**—Clerk of Works.—For Hertfordshire C.C. James & Bywaters and Rowland Pierce, 5, Bloomsbury-st., W.C.1.

***Nottingham.**—Chief Quantity Surveyor.—For T.C. City Engineer and Surveyor.

OCTOBER 23.

***London.**—Clerk of Works.—For Islington B.C. T.C., Upper-st., N.1.

NOVEMBER 10.

***London.**—Visiting Teacher for Land Surveying at School of Building, Ferndale-rd., Brixton.—For L.C.C. Education Officer (T.1), County Hall, S.E.1.

NO DATE.

***London.**—Architectural Assistants (Temp).—For L.C.C. Architect, County Hall.

***London.**—Heating Assistants; Assistant Civil Engineers; Assistant Quantity Surveyors; Surveyors' Clerks; Architectural and Engineering Assistants and Clerks of Works (Temp.).—For Air Ministry, Secretary (W.B.9), Adastral House.

***London.**—Assistant Surveyors (Temp.). — For Admiralty. Civil Engineer-in-Chief.

***Stafford.**—Five Junior Draughtsmen.—For E.C. Architect.

CURRENT & PROPOSED BUILDING WORK*

Abbreviations: T.C. for Town Council; U.D.C. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee; B.C. for Borough Council; P.C. for Parish Council; M.H. for Ministry of Health; M.T. for Ministry of Transport; C.B. for County Borough; B. of E. for Board of Education; M.W.B. for Metropolitan Water Board; B.S. for Borough Surveyor; B.E. for Borough Engineer; D.S. for District Surveyor; C. for Clerk; T.C. for Town Clerk; C.E. for County Engineer; C.S. for County Surveyor; S. for Surveyor; E. for Engineer.

Altrincham.—Tyrrell & Westlake, builders, Crowley-rd., Timperley, propose to develop Victoria Institute site, Cecil-rd., Hale, for housing.

Ashton-in-Makerfield.—Lancashire E.C. propose grammar school for Ashton and Upholland. Site at Weather Cock Hill Farm, Garswood-rd. Plans by County Architect, Preston. Estimated cost, £50,000.

Ashton-on-Mersey.—Cheshire County E.C. proposes senior boys' and girls' school (320 places each).

Beddington and Wallington.—U.D.C. approved: Block of 9 garages at rear of Clarendon-rd., for R. A. Reed, 29, Clarendon-rd.; office building at Kelvin Works, London-rd., for Hackbridge Cable Co., Ltd.—Council approved proposal by architects on behalf of client to erect shops and flats at Stafford-rd. adjacent to Presbyterian Church.

Blackburn.—T.C. approved: 75 houses, St. Aidan's-av., Mill Hill, for Midland Modern Homes, Ltd., 66, Wigan-rd., Bolton.

Blackpool.—Thompson & Porter, 81, Charles-st., propose petrol filling station.—Rev. C. Wells and Parochial Council of St. Mary's Church, South Shore, propose church hall in Mayfield-av. Plans by R. H. Jubb, architect, 52, Abingdon-st. Contracts not let.—Methodist Union proposing church, Waterloo-rd., South Shore, for which plans have been prepared by Halstead Best, 20, Clifton-st. Cost, £10,000.

Blaydon-on-Tyne.—U.D.C. received sanction from M.H. to acquisition of land at Rowlands Gill for houses.

Bootle.—Peter Walker (Warrington) and Robert Cain & Sons, Ltd., brewers, 105, Duke-st., Liverpool, propose "Windham Hotel," at £8,000. Plans by H. E. Davies & Son, Wellington-bldgs., The Strand, Liverpool. Contracts not placed.

Bournemouth.—Concrete groyne to be constructed near Hengistbury Head at £19,000.

Bradford.—Board of Governors of St. Bede's Grammar School, Heaton Hall, propose buildings, at £35,000. Plans by C. Simpson, 12, Cunliffe-terr., Cunliffe-rd.

Breconshire.—C.C. to erect new secondary school at Brynmawr or Gilwern.

Bristol.—City E. prepared plans for 86 houses, Knowle estate and 50 houses Horfield site.

Burslem.—Watkin & Maddox, National Bank-bldgs., architects for development of land, Hanley-rd., Sneyd Green, for 42 houses, for North Staffs Co-operative Society Dairy, Ltd., Shelton New-rd., Stoke.

Buxton.—Board of Management of Devonshire Royal Hospital proposing improvements to existing buildings, at £30,000. Plans by Sir Percy S. Worthington, F.R.I.B.A., 178, Oxford-rd., Manchester. Contracts not let.

Cheshire.—E.C. propose senior school at Sale Moor for 480 children.—Site to be acquired at Sale Moor for junior and infants' school; boys' and girls' senior schools, each containing accommodation for 320 scholars are to be erected at Ashton-on-Mersey; conversion of the Sale County Central school for a girls' senior school to accommodate 320; infants' and junior school, Park-rd., Ashton; secondary school for boys at Ashton; and elementary school at Sandbach. F. A. Browne, County Architect, Chester.

Chester-le-Street.—U.D.C. instructed S. to prepare plans for open-air bath.

Chichester.—R.D.C. to purchase land at Hunston for rehousing under Peckham's Copse clearance scheme.

Coventry.—C. Redgrave & Son, Earl-st., architects for showrooms, workrooms and stores in Warwick-la., for Holbrooks (Coventry), Ltd., Hartford-st. Contracts not let.—E.C. propose secondary school for boys in Walsgrave-rd.—E.C. propose erection of new art school. Architect, H. T. Jackson, A.R.I.B.A., 5, The Quadrant.

Coventry.—Public Health Committee recommend T.C. to make application for sanction to £69,570 for 170 "slum clearance" houses at Radford aerodrome rehousing site.—General Works Committee recommend application for sanction to £25,940 for road improvement works at Brownshill Green-rd., Nuntsla. and Parkgate-rd., and E.C. recommend sanction for loan of £8,465 for extension of Hen-la. Council school.

Croydon.—C.B. received M.H. sanction to borrow following: Mayday Hospital, heating works, etc., £1,851; Mayday Hospital, construction of tunnels for lighting mains, £1,255; reconstruction and provision of new greenhouses, £3,600; Winterbourne School, alterations and additions, £4,644; Duppas Council school, reconditioning, £1,470; Rockmount Council school, reconditioning, £237.—Tenders to be invited for conveniences in Bynes-rd.—Plans passed: W. A. Lewis & Partners, 130, Regent-st., W.1, workshop, Grenaby Works, Sydenham-rd.; Wylie & Berlyn, Ltd., Bywood-av., alterations to pavilion, The Glade, off Chaffinch-av.; S. & R. J. Everett & Co., Ltd., 939, London-rd., extension to premises at rear of 939, London-rd., West Thornton; Croydon Factory Estate, Ltd., Staffa-rd., Leyton, E.10, factory, corner of Progress-way and Commerce-way, Waddon; Croydon Gas Co., Katharine-st., 10 houses and block of 12 flats, new cul-de-sac off Waddon-rd., adjoining No. 106, Waddon; Whitgift Foundation, Whitgift Hospital, North End, Croydon, two dressing-rooms, Whitgift Grammar School, Haling Park; Wylie & Berlyn, Ltd., Bywood-av., four shops with rooms over, and one lock-up shop, Bywood-av., next Monk's Orchard garage; Sanders Bros. (Stores), Ltd., 48, Thomas-st., London, E.14, alterations and additions to store premises, 43, High-st., Thornton Heath; Howard Price, Lower Coombe-st., alterations and additions at factory, Lower Coombe-st., Waddon; R. W. J. Gibbon, 32, Great James-st., Bedford-row, W.C.1, conversion of two houses into 12 flats, 143 and 145, Portland-rd., S.E.25; Corporation, electricity sub-station, Chichester-rd.; L. J. Ashby, Girls' Public Day School Trust, Broadway-ct., Westminster, S.W.1, alterations to chemical laboratory, Croydon High School for Girls, Wellesley-rd.; S. & R. J. Everett & Co., Ltd., 939, London-rd., three-story extension, rear of 939, London-rd., West Thornton.

Doncaster.—T.C. acquired Beaconsfield Hall for conversion into gas showrooms and offices. Plans by H. A. Hickson, 51, Hallgate.—West Riding C.C. propose branch library at Rossington, at £1,575.

Eaglesham.—Plans approved for 27 houses and other offices at Pollbrae-cres. Donald Cameron, architect, 214, West Regent-st., Glasgow.

Failsworth.—U.D.C. propose 70 houses, Dean-st. and Wrigley Head sites. Plans by J. W. E. Brown, S.

Flint.—T.C. approved plans for Commercial garage in Chester-rd., for Crosville Motor Services, Ltd., Chester. Architect, R. C. Cowmeadow, Chester.

Flint.—T.C. approved plans for Welsh Methodist chapel at Bagillt, for Trustees.—T.C. propose 48 houses, Riverbank estate. F. A. Roberts, architect, Earl-chambs., Mold, for Housing Committee.

Glossop.—Waterside Board Mills, Ltd., propose paper mill at Hadfield. Director, N. J. Hulbert, 16, Victoria-sq., S.W.1.

* See also List of Contracts open.

**** In these lists every care is taken to ensure that information given is accurate and up to date, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work before plans are finally approved by the local authorities, "proposed" works at the time of publication have been actually commenced.**

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Agents Everywhere.

Guiseley.—School Managers of Church of England School given notice of their intention to carry out additions.

Hockmondwike.—West Riding E.C. propose elementary school for 300 scholars. H. Wormald, A.R.I.B.A., Education Architect, Wakefield.

Holmes Chapel.—Cheshire E.C. propose elementary school. Plans by County Architect, F. Anstead Browne, F.R.I.B.A., The Castle, Chester.

Holywell.—R.D.C. approved: 30 houses and bungalows, for Emrys Jones, builder, Saithaelwyd estate; 22 houses, Crown Farm, Lloc, Maxwell's (Wallasey), Ltd., 216, Seabank-rd., Wallasey; 54 houses on Saithaelwyd estate, for Boulton's (Bebington), Ltd, Stonehill-av., Old Chester-rd., Bebington.

Hoole.—U.D.C. propose 36 houses for aged persons.

Huddersfield.—Thomas Worthington & Sons, FF.R.I.B.A., 178, Oxford-rd., Manchester, to prepare plans for municipal hospital, Fleming House-la.

Hyde.—F. L. Eaton, of J. Eaton & Sons, architects, Stamford-st., Ashton-under-Lyne, prepared plans for rebuilding "Lamb Inn," Gee Cross.

Jarrow-on-Tyne.—B.E. instructed to prepare plans for public baths in Bede Burn-rd.

Keighley.—West Riding C.C. propose reconstruction of Keighley Court House. Plans by P. O. Platt, A.R.I.B.A., County Architect, Wakefield.—Board of Management of Keighley Victoria Hospital approved children's block comprising 33 beds. Plans by W. H. Watson, F.R.I.B.A., Barstow-sq., Wakefield. Contracts not placed.

Kettering.—U.D.C. has received sanction to borrow £29,239 for 100 houses, Avondale-rd. site.—E.C. propose elementary school, Headlands playing fields.—Governors of Kettering School for Boot and Shoe Manufacture, proposing extensions to existing premises. Plans by G. H. Lewin, F.R.I.B.A., County Architect, Northampton. Tenders not yet invited.

Kiveton Park.—Miners' Welfare Central Fund Committee propose pithead baths at Kiveton Park Colliery. Plans by J. H. Forshaw, F.R.I.B.A., Mines' Section, Romney House, Marsham-st., London, S.W.1.

Lanchester.—R.D.C. proposed demolishing 259 houses at Cornsay and 115 houses in other parts of area, under slum-clearance scheme.

Leeds.—Start being made with preparatory work on site for church of Venerable Bede, for Ripon Diocesan Church Forward Movement. Plans by Chorley, Gribbon & Foggitt, Park-pl., Leeds.

London (Deptford).—B.C. recommend repainting of Blackhorse Bridge.—Plans passed: J. Morton, 55, Watson-st., garage building, rear of 421, New Cross-rd., next to Stanley-st.

London (Hammersmith).—B.C. recommend application to Electricity Commissioners for £4,014 for 4 sub-station buildings.—L.C.C. sanctioned borrowing of £131,782 for 14 blocks of dwellings on Emlyn-rd. site.—C.C. approved new road to connect Woodla. with Latimer-rd., at £79,900.—Drying rooms to be erected on Emlyn-rd. site.—Council approved petrol filling station, Maclise-rd., for Olympia, Ltd.

London (Lambeth).—B.C. approved: L.C.C., open-air bath in Brockwell-pk.; H. L. Barnard, rebuilding of 1a, North-st.; P. A. Hamilton, extension to laundry, 274, South Lambeth-rd.; J. D. Taylor Marsh, alterations and additions to factory, 123, Coldharbour-la.; E. C. Gwen, building adjoining St. Mathias Church, Upper Tulse-hill; B. A. Savage, rebuilding of 1, Electric-av.; E. J. East, lock-up garages and repair shop rear of 99a and 100, Shakespeare-rd.; G. Aubrey Stapleton, conversion of "Mayfield," Barston-rd., into 10 one-room flats.

Lowestoft.—T.C. prepared to approve amended lay-out plan for development of Carver Hadenham's estate at Carlton-rd., Pakefield, for houses.—Parks and Properties Committee recommending approximately £18,000 in respect of purchase of Corton Golf Links estate, and £135,000 in connection with carrying out scheme for improvement of Esplanade.

Manchester.—Keates, Brown & Co., Hague-st., proposing factory, Sharston-rd., Northenden. Plans by Cruickshank & Seward, FF.R.I.B.A., architects, 16, Princess-st. Contracts not let.—Small & Parkes, Ltd., Hendham Vale Works, Collyhurst, proposing additions to works. Plans by H. S. Fairhurst & Son, F. & A.R.I.B.A., Chancery-chambs., 55, Brown-st. Contracts not placed.—Managers of Christ Church Schools, Pendlebury, propose additions to buildings, at £4,000. Plans by P. Thorpe, Union Bank-bldgs., Oldham. — Leonard Heywood, A.R.I.B.A., Housing Director, to prepare plans for community centre at Wythenshawe, at £4,000.

Maryport.—H. Oldfield, architect, 1, John-st., Workington, prepared plans for extensions to Cottage Hospital. Tenders to be invited.

Mexborough.—U.D.C. approved plans for technical school, Cemetery-rd., for West Riding E.C.

Newcastle-on-Tyne.—Amended plans for shop and showroom at Pudding Chare for R. Wooster been prepared by J. N. Fatkin, 17, Bigg-market.—Hadden & Hillman, builders, Huddlestone-rd., to erect 26 houses at Springwell-gdns., to plans by C. S. Errington, 46, Grainger-st., Newcastle. Plans approved.

Newcastle-under-Lyme.—Education Authority propose extensions to junior and infant school, High-st., Knutton, for 100 additional scholars.

Northampton.—Sir John Brown and A. E. Henson, F. & L.R.I.B.A., architects, St. Giles-st., preparing plans for extensions to works in Balfour-rd., for Northampton Machinery Co., Ltd., St. Michael's-rd. Contracts not let.

North Shields.—Plans prepared by A. K. Tasker & Child, Trinity-bldgs., New Bridge-st., Newcastle-on-Tyne, for nursery school in Percy-sq., for North Shields Nursery School Committee. No contracts placed.

Northumberland.—A new senior school proposed by C.C. in Mitford-rd., Morpeth. W. W. Tasker, County Hall, Newcastle-on-Tyne, architect.

Nuneaton.—Committee of Nuneaton Co-operative Employees' Club and Institute, Ltd., proposing additions to club headquarters, Dugdale-st. Plans by H. N. Jepson, Newdegate-pl. Contracts not placed.

Oldham.—Oldham Brewery Co., Ltd., Coldhurst-st, Brewery, propose to rebuild Albion Hotel. Plans by C. T. Taylor, Roberts & Bowman, 10, Clegg-st. Contracts not let.—Surveyors and Buildings Committee to provide an extra 200 houses. Plans by B.S.

Redcar.—Electricity showrooms costing £4,000 to be erected at Old Market-walk by T.C.

Rugby.—Overslade Estates, Ltd., acquired land between Overslade-la. and Bilton-rd., Bilton, for 1,000 houses and shops. L. Mitchell & Sons, Ltd., builders, Dunsmore-av., Rugby, are connected with scheme, and W. T. Loveday, 2a, Lawrence Sherriffe-st., is architect and surveyor to company.

St. Albans.—T.C. approved: 40 houses off Hatfield-rd., for Penbright Estates, Ltd.; 32, in Woodland-drive, for A. A. Welch.

Saltburn and Marske.—U.D.C. to extend and alter public swimming baths at £5,200.

Sheffield.—E. Cooper, builder, Shirebrook House, Gleadless Town End, proposes to develop land at Shirebrook-av. estate for about 200 houses.—Hadfield & Cawkwell, FF.R.I.B.A., 19, St. James-st., preparing plans for additions to buildings in Townhead-st., for showroom extension, for Kennings, Ltd., Mappin-bldgs., Norfolk-st. Contracts not let.—H. Birkett Leighton, 68, Upper Albert-rd., Meresbrook, preparing plans for extensions in Northumberland-rd., for Governors of Sheffield University.

Springhead (Oldham).—Gartside's Brookside Brewery, Ltd., Ashton-under-Lyne, propose hotel, Oldham-rd. and Station-road, Grotton.

Stanley.—U.D.C. to erect 100 houses without Government subsidy to relieve overcrowding.

Stocksbridge (Yorks).—L. Platts & Co., 18, Smithy Moor-la., propose 52 houses.

Stratford-on-Avon.—T.C. approved plans for 33 houses, Tiddington-rd. A. Ford.

Sunderland.—Seaside Development and Entertainments Committee have approved for submission to M.H. plans for £15,000 concert, dance and assembly hall at Seaburn.

Sunderland.—T.C. completed final arrangements with L.N.E.R. in regard to station at Fulwell. J. Miller, of York, is architect, L.N.E.R. Co.

Swindon.—R. J. Berwick & Son, Swindon, have been appointed architects in connection with elementary schools in Drove-rd. and Ferndale-rd.

Swinton and Pendlebury.—T.C. proposes 160 houses. H. Entwisle, B.E.

Thorne.—R.D.C. propose 100 houses. H. Plews, S.

Tynemouth.—Approval given by T.C. to conveniences at Balkwell playing fields at £963. Plans by B.E.

Tynemouth.—T.C. proposes convenience opposite "Percy Arms" public-house.

Urmston.—Albert Locke, Ltd., builders and contractors, Lostock-rd., Davyhulme, Manchester, prepared plans for 72 semi-detached houses in Abingdon-rd., Davyhulme, and 41 houses Royston-rd., Sherborne-rd. and Furness-rd., Davyhulme.

Wakefield.—W. Huson, L.R.I.B.A., 322, Leeds-rd., Newton Hill, prepared lay-out of Broom Hall estate, Bradford-rd., for housing estate for P. Calvert, Rope Works, Potovens.—West Riding E.C. propose elementary school for 360 children at Outwood, near Wakefield. Plans by H. Wormald, A.R.I.B.A., County Education Architect, County Hall.

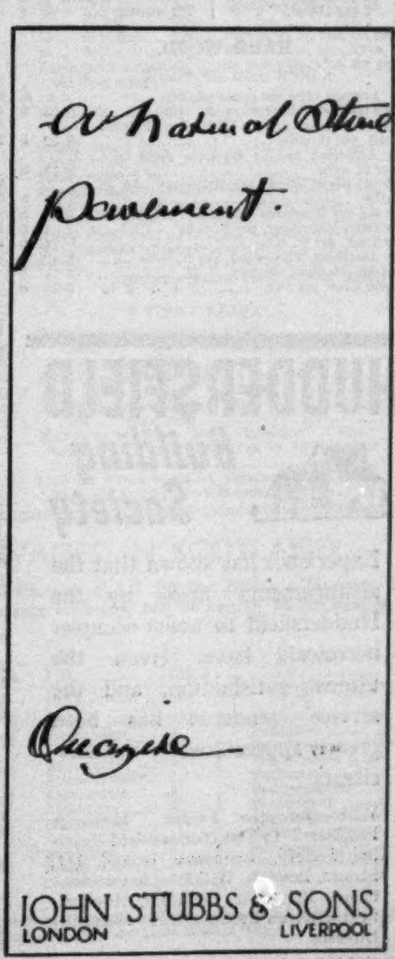
Warrington.—Curbishley Bros., Ltd., building contractors, Warrington-rd., Penketh, prepared plans for 66 houses, Nook-la.

West Hartlepool.—Plans approved by E.C. for converting residence "Brinkburn" into a boys' secondary school. Cost £26,000, and provision is made for 300 boys.

Wigton.—Cumberland E.C. propose school at Crofton Hall in connection with the Land Settlement Association Scheme.—Land Settlement Association Scheme propose 29 additional houses at Bank End and Micklethwaite, Crofton.

Wingate.—Hays & Gray, Wingate, architects for branch premises in North-rd., for Station Town, Seaham, Hordon Co-op. Society. No contracts let.

Worsborough.—U.D.C. propose 152 houses in Yews-la. Plans by T. Shield, S.



NEW COMPANIES

The particulars quoted below have been compiled by Messrs. Jordan & Sons, Ltd., Company Registration Agents, of 116 and 117, Chancery-lane, W.C.2, from the documents available at the Companies Registry.

THOMAS & CALEY, LTD. (318,388). Registered September 10. 23, Beverley-road, Wallasey. Builders and contractors, etc. Nominal capital, £4,000.

O. S. TURNER & SON, LTD. (318,444). Registered September 12. 236, St. Ann's-road, N.15. Builders and contractors. Nominal capital, £1,000.

CHITTY & FISH, LTD. (318,402). Registered September 11. "Bramley," 210, Birchwood - road, Wilmington, Kent. Builders, etc. Nominal capital, £2,100.

WILLIAMS & PHILLIPS, LTD. (318,423). Registered September 11. 10, Fetter-lane, E.C.4. Builders and estate developers, etc. Nominal capital, £2,000.

MAPESBURY, LTD. (318,440). Registered September 12. Norwich House, Southampton-street, High Holborn, W.C.1. To lay out and prepare land for building purposes, etc. Nominal capital, £5,000.

WEST (PLASTERERS), LTD. (318,302). Registered September 10. Building and plastering contractor. 9, Roland-mansions, South Kensington, S.W.7. Nominal capital, £1,000.

BROXMEAD LANDS DEVELOPMENT, LTD. (317,839). Registered August 24. 16, Harpur-street, W.C.1. Builders, etc. Nominal capital, £10,000.

MIDLAND MODERN HOMES, LTD. (317,797). Registered August 22. Builders, etc. Nominal capital, £1,000. A. Greenhalgh, 66, Wigan-road, Bolton.

C. DAY & SON, LTD. (318,012). Registered August 29. Builders, etc. Nominal capital, £4,000. C. H. Day, 63, Cottimore-lane, Walton-on-Thames, Surrey.

MANNINGTREE JOINERY, LTD. (317,905). Registered August 26. Station-road, Manningtree, Essex. Builders, joiners, etc. Nominal capital, £2,000.

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Messrs. Alfred Savill and Sons, 51a, Lincoln's Inn Fields, W.C.2, are to sell, by order of the Eyre Estate, a freehold building site of about 54,600 sq. ft. at No. 6, Hall-road. This site, which has a frontage of 138 ft., has been passed for flats by the London County Council.

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Per 1,000. Delivered at London Goods Stations.

	£ s. d.		£ s. d.
"Phorpres"	*2 6 3	Flettons, B'll'n'se	3 6 6
Flettons at		Best blue	
King's Cross	*2 6 0	Pressed Staffs	3 5 0
Do. grooved for		Do. Bullnose	3 15 0
Plaster	*2 8 3	Blue Wire Cuts	7 0 0

White Midhurst Facing Bricks (delivered London site) — 4 0 0
"Phorpres" Whites (King's Cross) — 3 11 3
"Phorpres" Rustic Facings (King's Cross) — *3 6 3
Best Stourbridge Fire Brick:—
2½ in. 7 15 0 3 in. — 8 15 0
*Delivered to site in W.C. district, 4/3 extra per 1,000.

GLAZED BRICKS—

Best White		Db'le Str'tch'rs	31 10 0
Ivory and Salt Glazed		D'ble Headers	28 10 0
Stretcher	23 0 0	One side and two Ends	32 10 0
Headers	22 10 0	Two sides and one End	33 10 0
Quoins, Bullnose and 4½ in. Flats	29 10 0	Splays and Squints	30 0 0

Second Quality, £1 per 1,000 less than best. Cream and buff, £2 extra over white. Other colours. Hard Glaze, £5 10s. extra over white.

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2" per yd. sup.	1 6	3" per yd. sup.	2 0
2½" " "	1 8	4" " "	2 4
CRANHAM TERRA COTTA.			
2" per yd. sup.	3 0	3" per yd. sup.	3 8
2½" " "	3 6	4" " "	4 7
HEMPSTEAD—KEYED TWO SIDES.			
12" x 9" x 2"	2 6	12" x 9" x 3"	3 0
12" x 9" x 2½"	2 9	12" x 9" x 4"	3 9

Per yard super d/d. Free on site, London.

	s. d.	
Thames Ballast	7 3	per yd.
Pit Ballast	6 3	" "
Pit Sand	7 9	" "
Washed Sand	8 3	" "
¾ in. Shingle	7 3	" "
¾ in. Broken Brick	11 3	" "
Tan Breeze	8 3	" "

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Best British Portland Cement, Standard Specification, delivered London Area in jute sacks (11 to ton), or paper bags (20 to ton) free (non-returnable):—

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2 ton loads and upwards site — Per ton	1 19 0
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"Ferrocrete" Rapid Hardening Cement:—	
4 ton loads and upwards site	2 5 0
1 ton to 4 tons site	2 7 0
Alongside Vauxhall in 80-ton lots	2 1 0

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Water Repellent "Blue Circle" Cement, 20/- per ton extra on ordinary "Blue Circle" Portland Cement prices.	
"Colocrete" Nos. 1 and 2 Coloured Rapid Hardening Portland Cement in 1-cwt. paper bags free (non-returnable) in 1-ton lots and upwards site	3 6 0
"Snowcrete" White Portland Cement in 1-cwt. paper bags free (non-returnable) 1 ton and upwards site	8 15 0
Super Cement (Waterproof) paper bags free	3 9 0
Roman Cement	6 15 0
Parian Cement	6 0 0
Keene's Cement, White	6 0 0
" " Pink	5 12 6

PLASTER.

	£ s. d.		£ s. d.
Coarse, Pink	2 17 0	Sirapite, Coarse	3 5 0
" White	3 10 0	" Finish	3 13 0
Pioneer	3 13 0		
Super Carbo	2 7 6	4-ton loads & over London Area, paper bags free.	
Carbo Setting	2 12 6		
Best Ground Blue Lias Lime	1 17 6	Grey Stone Lime	2 2 0
		Chalk Lime	2 2 0
Granite Chippings	1 12 0	Hair per cwt.	2 2 6

NOTE.—Sacks are charged 1s. 9d. each, and credited 1s. 6d., if returned in good condition within three months, carr. paid.
Stourbridge Fireclay in sacks 37s. 0d. per ton at rly. dep.

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BEER STONE—RANDOM BLOCK—
Free on rail at Seaton Station, per ft. cube — 2 3
Delivered free on rail Nine Elms, S.R. per ft. cube — 3 1½
Selected approximate size one way, 1d. per cubic ft. extra; selected approximately three sizes or for special work, 3d. per cubic ft. extra

PORTLAND STONE—
Brown Whitbed, in random blocks of 20 ft. average, delivered in railway trucks at Nine Elms, S. Rly., South Lambeth Station, G.W.R., and Westbourne Park, Paddington, G.W.R., per ft. cube — 4 4½
Do. do. delivered on road waggons at above stations, per ft. cube — 4 5½
White bastard, 3d. per ft. cube extra.
NOTE.—1d. per ft. cube extra for every ft. over 20 ft. average, and ½d. beyond 30 ft.

HOPTON-WOOD STONE—
F.O.R. Quarries, Wirksworth, Derbyshire — s. d.
Random blocks from 10ft. and over P.ft.cb. — 14 0
Sawn two sides — 22 6
Sawn three or four sides — 27 9

CHILMARK—RANDOM BLOCK—
At Nine Elms, per ft. cube — 3 11

YORK STONE, BLUE—*Robin Hood Quality.*
Delivered at any Goods Station, London.

6 in. sawn two sides landings to sizes (under 30 ft. super) — Per ft. super	5 6
6 in. rubbed two sides, ditto "	6 0
3in. sawn two sides slabs (random sizes) "	2 8½
2in. to 2½in. sawn one side slabs (random sizes) "	1 6½
1½ in. to 2 in., ditto "	1 3½

HARD YORK—
Delivered at any Goods Station, London.

Scappled random blocks — Per ft. cube	6 3
6-in. sawn two sides landings to sizes (under 40 ft. super) — Per ft., super	5 1½
6 in. rubbed two sides, ditto "	6 1½
4 in. sawn two sides slabs (random sizes) "	3 1½
3 in. ditto ditto "	2 8
2in. self-faced random flags — Per yd. super	7 6

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SOFT WOOD.

GOOD BUILDING DEAL.

Inches.	Per stan.	Inches.	Per stan.
4 × 11	£23 10	3 × 6	£18 10
4 × 9	22 10	3 × 11	19 10
4 × 8	21 0	2 × 11	19 10
4 × 7	19 0	3 × 9	19 10
3 × 8	17 10	2½ × 9	19 10
3 × 7	16 0	3 × 4½	17 10
2½ × 7	18 0	3 × 4	17 10

PLANED BOARDS.

1 × 11	£22 10	1 × 9	£21

PLAIN EDGE FLOORING.

Inches.	per sq.	Inches.	per sq.
¾	16/-	1¼	25/-
¼	17/-	1½	31/6
1	19/-		

TONGUED AND GROOVED FLOORING

Inches.	per sq.
1	21/-
1¼	26/-
1½	32/6

MATCHING (BEST).

Inches.	per sq.
¾	10/-
¼	18/6
1	22/6

ins. BATTENS.	s. d.
¾ × 2 per 100 ft.	2 6

SAWN LATHS.

	s. d.
Per bundle	2 9

HARD WOOD.

1 INCH AND UP THICK.

	£ s. d.
Average price for prime quality.	
Dry Austrian Wainscot, per ft. cube	0 15 0
Dry American and/or Japanese Figured Oak, per ft. cube	0 12 0
Dry American and/or Japanese plain Oak, per ft. cube	0 10 0
Dry sq. edged Honduras Mahogany, per ft. cube	0 14 0
Dry log-cut Honduras Mahogany, per ft. cube	0 16 0
Dry Cuba Mahogany, per ft. cube	1 1 0
Dry Teak, per ft. cube	0 14 0
Dry American Whitewood, per ft. cube	0 10 0
Best Scotch Glue, per cwt.	3 0 0
Liquid Glue, per cwt. — 4 7 0 to	5 10 0

HUDDERSFIELD Building Society

Experience has shown that the arrangements made by the Huddersfield to assist occupier borrowers have given the utmost satisfaction, and the service rendered has been greatly appreciated by builders' clients.

Write for the Folder "Mortgage Facilities" to The Huddersfield Building Society, Britannia House, 203, Strand, London, W.C.2, or to the Head Office, Britannia Buildings, Huddersfield. Andrew Stewart, C.A., Managing Director.

WHEN YOU INVEST—A HOUSE IS BEST

SLATES.

First quality slates from Bangor or Portmadoc, carriage paid in full truck loads to London Rate Station. Per 1,000 actual.

	£ s. d.		£ s. d.
24 by 12	29 15 0	18 by 10	15 12 6
22 by 12	25 0 0	16 by 9	13 15 0
22 by 11	22 10 0	16 by 10	16 10 0
20 by 12	22 0 0	16 by 8	15 7 6
20 by 10	19 7 6		

TILES.

Delivered at London rate stations in full truck loads of not less than 6 tons. Per 1,000 f.o.r. London.

Best machine-made tiles from Broseley or Staffordshire district	£4 2 6
ditto hand-made ditto	4 10 0
Ornamental ditto	4 15 0
Hip and valley tiles (per dozen) Hand-made	0 8 6
Machine-made	0 8 0

METALS.

JOISTS, GIRDERS, &c., TO LONDON STATION, PER TON—

R.S. Joists, cut and fitted	£13 10 0
Plain Compound Girders	16 0 0
" Stanchions	18 0 0
In Roof Work	20 0 0

MILD STEEL ROUNDS.—To London Stations, per ton.

Diameter.	£ s. d.	Diameter.	£ s. d.
½ in.	14 5 0	⅝ in. to ¾ in.	12 15 0
⅜ in.	13 5 0	⅞ in. to 2½ in.	12 5 0

WROUGHT-IRON TUBES AND FITTINGS—
(Discount off List for lot of not less than £7 net value delivered direct from Works, 2½ per cent. less above gross discounts, carriage forward, if sent from London Stocks.)

	Standard Wrot. Mild Steel Tubes and Tubulars Sizes ⅛in. to 6in. %	Genuine Wrot. (Puddled) Iron Tubes and Tubulars Sizes ⅛in. to 6in. %	Standard Fittings Sizes ⅛in. to 6in. %	Standard Flanges Sizes ⅛ in. to 6in. %
Gas	65	52½	57½	70
Water	61½	48½	52½	65
Steam	57½	45	47½	60
Galv. gas	52½	40	47½	60
Galv. water	47½	35	42½	55
Galv. steam	42½	30	37½	50

C.I. HALF-ROUND GUTTERS—London Price ex Works.

Per yd. in 6 ft. lengths.	Gutters.	Angles and Nozzles.	Stop Ends.
3 in.	1/5½	1/1½	4½d.
3½ in.	1/6½	1/3	5½d.
4 in.	1/6½	1/4½	6½d.
4½ in.	1/8	1/6½	9½d.
5 in.	1/10½	1/8½	10d.

O.G. GUTTERS.

3 in.	1/7½	1/5½	7d.
3½ in.	1/9½	1/5½	7½d.
4 in.	1/11	1/6½	8½d.
4½ in.	2/-	1/9½	9½d.
5 in.	2/4½	2/0½	11½d.

RAIN WATER PIPES, &c.

Per yd. in 6 fts.	Pipe.	Bends, stock Branches, angles, stock angles.
2 in.	2/2½	1/4½ 2/0
2½ in.	2/3½	1/6½ 2/4½
3 in.	2/9½	1/11 2/10½
3½ in.	3/3½	2/3½ 3/3½
4 in.	3/9	2/9 4/0½

Less 20 per cent. trade discount.
Tonnage allowance—4-ton lots, 5 per cent.
2-ton lots, 2½ per cent.

L.C.C. COATED SOIL PIPES—London Prices ex Stock,

	Pipe. s. d.	Bends, stock Branches angles, stock angles. s. d.	s. d.
2in. per yd. in 6 fts.	2 9½	2 0	2 5½
2½in. "	3 2	2 2½	3 0½
3in. "	3 6	2 5½	3 7½
3½in. "	3 9½	3 0½	4 2½
4in. "	4 2½	3 4½	4 10½

L.C.C. COATED DRAIN PIPES.—London Prices ex Stock

	Pipe. s. d.	Bends, stock Branches, angles, stock angles. s. d.	s. d.
3in. per yd. in 9ft. lengths	3 4½	4 6	7 0
cwt. qr. lbs.			
4 in. " 1 1 20	5 1	5 9	8 6
5 in. " 1 2 22	6 6	8 9	13 9
6 in. " 2 0 6	7 6	10 3	18 0

Gaskin for jointing 41/- per cwt.

	Per ton in London. £ s. d.		£ s. d.
IRON—			
Common Bars	10 0 0	to	10 10 0
Staffordshire Crown Bars—			
Good merchant quality	11 0 0	to	11 10 0
Staffordshire Marked Bars	14 10 0	...	15 10 0
Mild Steel Bars	9 10 0	...	10 10 0
Steel Bars, Ferro-Concrete quality, basis price	9 0 0	...	9 10 0
Hoop iron, basis price	11 10 0	...	12 10 0
" Galvanised	28 0 0	...	29 0 0

* The information given on this page has been specially compiled for THE BUILDER, and is copyright. The aim in this list is to give, as far as possible, the *average* prices of materials, not necessarily the highest or lowest. Quality and quantity obviously affect prices—a fact which should be remembered by those who make use of this information.

PRICES CURRENT OF MATERIALS—(*Contd.*).

IRON—	Per ton in London. £ s. d.		£ s. d.
Soft Steel Sheets, Black—			
Ordinary sizes, to 20 g.	11 10 0	...	12 0 0
" " 24 g.	12 10 0	...	13 10 0
" " 26 g.	14 10 0	...	15 10 0
Sheets Flat Best Soft Steel, C.R. and C.A. quality—			
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 22 g. and 24 g.	15 0 0	...	16 0 0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 26 g.	17 10 0	...	18 10 0
No. 1 quality £4 per ton extra.			
Flat and Galvanised Corrugated Sheets—			
Ordinary sizes, 6 ft. to 9 ft. to 20 g.	14 0 0	...	15 10 0
Ordinary sizes, 6 ft. to 9 ft. to 22 g. and 24 g.	16 10 0	...	17 10 0
Ordinary sizes, 6 ft. to 9 ft. to 26 g.	17 10 0	...	19 0 0
Sheets, Galvanised, Flat, Best quality—			
Best Soft Steel Sheets, 6 ft. by 2 ft. to 3 ft. to 20 g. and thicker	15 10 0	...	17 10 0
Best Soft Steel Sheets, 22 g. and 24 g.	16 0 0	...	18 0 0
Best Soft Steel Sheets, 26 g.	17 10 0	...	19 10 0
Cut Nails, 3 in. to 6 in.	16 10 0	...	18 0 0
(Under 3 in. usual trade extras.)			

METAL WINDOWS.—Standard sizes, suitable for complete houses, including all fittings, painting two coats and delivery to job, average price about 1s. 4d. to 1s. 7d. per foot super.

COPPER.

		s. d
Seamless Copper tubes (basis)	per lb.	0 10
Strong sheet	"	0 11
Thin	"	1 0
Copper nails	"	1 0
Copper wire	"	1 0

PLUMBERS' BRASS WORK.

Delivered in London.

NEW RIVER PATTERN SCREW DOWN BIB COCKS FOR IRON.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.	
29/-	45/-	76/-	153/-	246/-	510/-	per doz.

NEW RIVER PATTERN SCREW DOWN STOP COCKS AND UNIONS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.	
41/6	62/-	92/-	174/-	200/-	588/-	per doz.

RIVER PATTERN SCREW DOWN MAIN FERRULES.

½ in.	¾ in.	1 in.		
39/-	60/-	116/6	per doz.	

CAPS AND SCREWS.

1¼ in.	1½ in.	2 in.	3 in.	3½ in.	4 in.	
7/6	10/-	14/-	23/-	30/-	42/-	per doz.

DOUBLE NUT BOILER SCREWS.

½ in.	¾ in.	1 in.	1½ in.	1¼ in.	2 in.	
7/6	11/-	17/-	29/-	36/-	63/-	per doz.

BRASS SLEEVES.

1½ in.	2 in.	3 in.	3½ in.	4 in.	
10/-	12/-	20/-	24/-	31/-	per doz.

NEW RIVER PATTERN CROYDON BALL VALVES S.F.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	
35/-	56/-	98/-	162/-	228/-	per doz.

DRAWN LEAD P. & S. TRAPS WITH GLASS CLEANING SCREW.

	1¼ in.	1½ in.	2 in.	3 in.	
3 lbs. P. traps	33/-	41/-	56/-	101/-	per doz.
3 lbs. S. traps	35/-	45/-	66/-	126/	per doz.

TIN.—English ingots, 2/6 per lb. SOLDER.—Plumbers' 1/1, Tinmen's 1/3, Blowpipe 1/4 per lb.

LEAD, &c.

(Delivered in London.)	£ s. d
LEAD.—Sheet, English, 4 lb. and up	26 5 0
Pipe in coils	25 15 0
Soil pipe	31 10 0
Compo pipe	31 15 0

NOTE.—Country delivery, 20/- per ton extra, lots under 3 cwt. 4/- per cwt. extra, and over 3 cwt. and under 5 cwt., 2/6 per cwt. extra. Cut to sizes, 4/- per cwt. extra.

Old lead, ex London area, at Mills ..... per ton } £16 5 0

PAINTS, &c.

		£ s. d.
Raw Linseed Oil, in pipes	per gallon	0 3 0
" " in barrels	"	0 3 2
" " in drums	"	0 3 4
Boiled " " in barrels	"	0 3 5
" " in drums	"	0 3 7
Turpentine, in barrels	"	0 3 9
" in drums (10 galls.)	"	0 3 11
Genuine Ground English White Lead, per ton		51 0 0

(In not less than 5-cwt. casks.)
Extra for 1-cwt. kegs over 5-cwt. casks is 2/9 cwt.

GENUINE WHITE LEAD PAINT.

"Father Thames," "Nine Elms," "Park," "Supremus," "St. Paul's," "Morganswyte," "Polacco," "J" Brand, and other best brands (in 14-lb. tins) not less than 5-cwt. lots per ton delivered £ s. d. 70 0 0

Read Lead, Dry (packages extra)	per ton	37 0 0
Best Linseed Oil Putty	per cwt.	0 13 0
Size. XD quality	...fkn.	0 3 6

VARNISHES, &c.

		Per gallon.
Oak Varnish	Outside	0 14 0
Fine Do.	Do.	0 16 0
Fine Copal	Do.	0 18 0
Pale Copal	Do.	1 0 0
Pale Opal Carriage	Do.	1 4 0
Best Do.	Do.	1 12 0
Floor Varnish	Inside	0 18 0
Fine Pale Paper	Do.	0 18 0
Fine Copal Cabinet	Do.	1 2 0
Fine Copal Flatting	Do.	1 0 0
Hard Drying Oak	Do.	0 18 0
Fine Hard Drying Oak	Do.	0 19 6
Fine Copal Varnish	Do.	1 0 6
Pale Do.	Do.	1 12 0
Best Do.	Do.	1 2 6
Best Japan Gold Size		0 12 6
Best Black Japan		0 10 0
Oak and Mahogany Stain (water)		0 12 0
Brunswick Black		0 7 6
Berlin Black		0 14 0
Knotting (patent)		0 15 0
French and Brush Polish		0 12 0
Liquid Dryers in Terebene		0 9 0
Cuirass Black Enamel		0 7 0

GLASS

ENGLISH SHEET GLASS IN CRATES OF STOCK SIZES.

ORDINARY GLAZING QUALITY & SELECTED GLAZING QUALITY.

per ft. super.		per ft. super
15 oz. O.G.Q. 2½d.	32 oz. O.G.Q.	6½d.
15 " S.G.Q. 2½d.	32 " S.G.Q.	7d.
21 " O.G.Q. 3½d.	Obscured Sheet, 15 oz.	3½d.
21 " S.G.Q. 3½d.	" " 21 "	4½d.
26 " O.G.Q. 4½d.	Fluted, 15 oz. 6½d., 21 oz. 9d.	
26 " S.G.Q. 5d.	Em'ld 15 oz. 4½d., 21 oz. 5½d.	

Extra price according to size and substance for squares cut from stock.

ENGLISH ROLLED plate in CRATES OF STOCK SIZES.

	Per ft.
Rolled plate ¼ in.	4½d
Rough rolled, ⅜ in.	5½d
Rough rolled, ½ in.	8½d.
Figured, Rolled, Baltic, Oceanic, Arctic, Stippolyte, and small and large Flemish White	5½d.
Do. tinted	8d.
Rolled Sheet	5d.
White Rolled Cathedral	5d.
Tinted Do.	7½d.

Cast plate is same price as rough rolled.

"VITA" GLASS.	per ft. s. d
Clearsheet—not exceeding 1 foot	1 0
Do. do. 2 feet	1 3
Do. over 2 feet	1 9
Polished plate not exceeding 1 foot	1 6
Do. do. 2 feet	3 0
Cathedral—not exceeding 1 foot	1 0
Do. larger sizes	1 6
Horticultural Sheet and Cathedral "Vita" Glass. Sizes up to 24 inches by 18 inches or not exceeding 3 feet	1 6
3/16 in. Wired Georgian Design. Sizes up to 96 inches long by up to 24 inches wide	2 6

BUILDING TRADE WAGES IN SCOTLAND

Following are grade rates authorised by the Scottish N.J.C. for the Building Industry from February 1. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur.

Grade Classification	A	A¹	A²	A³	B	B¹
Craftsmen	1/7	1/6½	1/6	1/5½	1/5	1/4½
Labourers	1/2½	1/1½	1/1½	1/1	1/0½	1/0½

Aberdeen	A	Dundee	A	Hawick	A²
Airdrie	A	Dunfermline	A	Helensburgh	A
Alexandria	A	Dunoon	A	*Inverness	B
Arbroath	A	East Lothian	A	Kilmarnock	A
Ayrshire	A	Edinburgh	A	Kincardineshire	A
Bathgate	A	Falkirk	A	Kinross-shire	A
Bo'ness	A	Forfarshire	A²	Kirkcaldy	A
Broughty Ferry	A	Fort William	B	Lanarkshire	A
Clackmannanshire	A	Galashiels	A²	Leith	A
Coatbridge	A	Glasgow	A	Midlothian	A
Dumbartonshire	A	Greenock	A	Motherwell	A
Dumfries	A²	Hamilton	A	Peeblesshire	A²
Dumfriesshire	A				

Perth	A	Selkirkshire	A
Perthshire	A²	Stirling	A
Peterhead	A²	Stirlingshire, West	A
Renfrewshire	A	West Lothian	A
Rothesay	A	Wishaw	A
Roxburghshire	A²		
St. Andrews	A		

The information given in this table is copyright. *Slaters and Plumbers have special rate of 1/5½; and Labourers 10d. to 1/-. The rates of wages in various towns in England and Wales are given on page 660.

THE SCOTTISH BUILDER

NEW BUILDINGS

ABERDEEN.—EXTENSION.—The Governors of Robert Gordon's College have decided to proceed with the first instalment of the extension scheme recently approved, at £7,664.

ABERDEEN.—HOUSING.—The Plans and Planning Committee of the T.C. have approved the erection by the municipality of 100 houses at Tanfield, at £40,700, and also 376 houses at Great Northern-road and Hayton-road, at £145,300.

ARDROSSAN.—HOUSES.—The T.C. has approved of plans for 300 houses on the Parkhouse and Whitlees grounds.

BARRHEAD.—HALLS.—Plans are in hand for new Renfrewshire Church Halls. Messrs. Lennox and McMath, architects, 102, Bath-street, Glasgow.

BELLSHILL.—CENTRE.—A site has been secured for the new premises in Main-street for the Scottish Council for Community Service During Unemployment. The building will cost about £3,000.

CARNOUSTIE. — HOUSES. — Plans are in hand for 30 houses at Charles-street. Messrs. Bruce, Son and Norton, architects, 10, Whitehall-street, Dundee.

CRIEFF. — BUILDING. — The T.C. has decided on the erection of 32 houses of the three- and four-apartment type at Croftnappock at £10,000 and 20 houses on the North Bridge-street site to cost £6,200. Plans are also well advanced for the reconstruction scheme at Crieff Public School to be undertaken by the County Council E.C. at £10,000.

DUNDEE.—BUILDING.—Ground has been purchased by representatives of Church of Scotland Extension Committee at Mid-Craigie and Craigiebank, Dundee. Dundee Presbytery was informed that £7,000 and £3,000 will be made for a church and hall at these respective places.

EAST KILBRIDE.—RECONSTRUCTION.—Plans in hand for a £14,000 scheme of reconstruction and additions to the public school. Mr. John Stewart, architect, Albert-street, Motherwell. The measurers are Messrs Mathieson and Fraser, 197, St. Vincent-street, Glasgow.

ELGIN.—ADDITIONS.—Plans are in hand for a scheme of reconstruction and additions to the Grand Hotel. Mr. Will Barclay, architect, West Campbell-street, Glasgow.

ELLON. — BRIDGE. — The Aberdeenshire C.C. has decided to erect a reinforced concrete bridge at Elnie Burn, and also a reinforced concrete culvert on Mill Lade. Plans are by Mr. M. Heddle, B.Sc., A.M.Inst.C.E., County Road Surveyor and Engineer, 25, Union-terrace, Aberdeen.

FORRES.—BRIDGE.—The contract for the construction and erection of a steel road-bridge over the river Findhorn has been placed with Messrs. P. and W. MacLellan, of Glasgow.

GARTCOSH.—BUILDING.—Plans are in hand and will come before Lanarkshire Public Health Committee for a new three-storied building for a nurses' house at the Mental Hospital. Mr. Thomas Somers, architect, Office of Public Works, Glasgow.

GLASGOW.—DWELLINGS. — The erection of dwellings suitable for old couples, widows and spinsters, is being considered by the Glasgow Workmen's Dwellings Co.

GLASGOW.—HOSPITAL.—The directors of the Glasgow Homœopathic Hospital have decided to erect a new hospital at £200,000. The building will be at Kirklee.

GLASGOW. — EXTENSIONS.—The Library Committee has agreed to extensions being made to the Mitchell Library. These extensions, which will cost £65,000, is designed mainly to give more book accommodation. The new building will be erected on a site adjoining the present library and St. Andrew's Hall.

HELENSBURGH.—HOUSES.—Plans are to be prepared for a new Corporation Housing Scheme, consisting of 36 houses, etc. Messrs.

(*Continued on page* 669)

CURRENT PRICES FOR BUILDING WORK IN LONDON*

EXCAVATOR.

		s.	d.
Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep	per yard cube	8	0
Add if in clay	„ „	1	0
Add for every additional depth of 6 ft.	„ „	0	6
Planking and strutting to trenches	per foot super	0	3
Do. to sides of excavation, including shoring	„ „	1	0

CONCRETOR.

		s.	d.
Portland cement concrete in foundations 1 to 6	per yard cube	24	0
Add if in underpinning in short lengths	„ „	5	0
Add if in floors 6 in. thick	„ „	2	0
Add if in beams	„ „	2	6
Add if aggregate 1 : 2 : 4	„ „	8	0
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.	„ „	1	6

BRICKLAYER.

		£	s.	d.
Reduced brickwork in lime mortar and Fletton bricks	per rod	26	0	0
Add if in stocks	„	6	0	0
Add if in Staffordshire blues	„	22	0	0
Add if in Portland cement and sand	„	1	5	0

FACINGS.

		s.	d.
Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks	per ft. super	0	0	1½

POINTING.

		s.	d.
Neat flat struck or weathered joint	„ „	0	0	3

ARCHES.

		s.	d.
Extra only to the price of ordinary brickwork :—			
Fair external in half brick rings	„ „	0	0	10
Axed in stocks	„ „	0	0	9
Rubbed and gauged jointed in putty camber or segmental	„ „	0	5	9

SUNDRIES.

		£	s.	d.
Damp course in double course of slates breaking joint and bedded in Portland cement	„ „	0	0	11
Setting ordinary register grates and stoves	each	1	0	0
Setting kitchener, including forming flues, &c., with all necessary fire bricks	„	4	15	0

ASPHALTER.

		s.	d.
Half-inch horizontal damp course	per yard super	4	6
Three-quarter-inch vertical damp course	„ „	9	6
Three-quarter-inch on flats in two thicknesses	„ „	6	0
Angle fillet	per foot run	0	3
Skirting and fillet 6 in. high	„ „	1	0

MASON.

		s.	d.
York stone templates fixed	per foot cube	12	9
York stone sills fixed	„ „	22	0
Bath stone and all labour fixed	„ „	10	6
Beer stone and all labour fixed	„ „	15	0
Portland stone fixed	„ „	15	6
Chilmark stone fixed complete	„ „	13	6

SLATER.

		s.	d.
Welsh 16 in. × 8 in. 3 in. lap, including nails	per square	70	0
Do. 20 in. × 10 in. Do. Do.	„	71	6
Do. 24 in. × 12 in. Do. Do.	„	73	6

CARPENTER AND JOINER.

		s.	d.
Fir framed in plates	per foot cube	3	6
Do. joists	„ „	4	0
Do. roofs, floors and partitions	„ „	4	6
Do. trusses	„ „	6	9

	¾″	1″	1½″	2″
Deal rough close boarding per sq.	30/-	35/-	43/-	70/-

		s.	d.
Flat centering for concrete floor, including struts or hangers	„	50	0
Do. to beams	per ft. sup.	0	8
Centre for arches	„	1	6
Gutter boards and bearers	„	1	0

FLOORING.	¾″	1″	1¼″	1½″
Deal-edges shot per sq.	—	38/-	45/-	52/-
Do. tongued and grooved „	—	43/-	50/-	58/-
Do. matchings „	40/-	45/-	—	—
Moulded skirtings, including backings and grounds per ft. sup.	1/4	1/7	1/9	2/3

SASHES AND FRAMES.

		s.	d.
One-and-a-half moulded sashes or casements	per foot super	1	9
Two Do. Do. Do.	„ „	2	0
Add for fitting and fixing	„ „	0	2
Deal cased frames with 1 in. inner and outer linings, 1¼ in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares, double-hung, double hung with pulleys, lines and weights, average size		3	3

DOORS.	1¼″	1¾″	2″
Two-panel square framed per ft. sup.	2/1	2/3	2/5
Four-panel Do. „	2/4	2/6	2/9
Two-panel moulded both sides „	2/6	2/9	2/11
Four-panel Do. Do. „	2/9	2/11	3/2

CARPENTER AND JOINER—continued.

FRAMES.

		s.	d.
Deal wrot moulded and rebated	per foot cube	12	0

	1″	1¼″	1½″
Plain deal jamb linings framed per ft. sup.	1/7	1/8	1/11
Deal shelves and bearers „	1/2	1/4	1/7
Add if cross-tongued „	2d.	2d.	2d.

STAIRCASES.

	1″	1¼″	1½″	2″	2½″
Deal treads and risers in and including rough brackets	2/-	2/3	2/8	—	—
Deal strings wrot on both sides and framed	1/8	2/-	2/2	2/8	—

		s.	d.
Housings for steps and risers	each	0	11
Deal balusters, 1 in. x 1¼ in.	per ft. run	0	9
Mahogany handrail, average 3 in. x 3 in.	„ „	5	6
Add if ramped	„ „	11	0
Add if wreathed	„ „	22	0

FIXING ONLY IRONMONGERY (INCLUDING SCREWS).

6 in. barrel bolts	8½d.	Rim locks	2/-
Sash fasteners	11½d.	Mortice locks	4/6
Casement fasteners	1/5	Patent spring hinges and letting into floor and making good	19/-
Casement stays	1/2		
Cupboard locks	1/5		

FOUNDER AND SMITH.

		s.	d.
Rolled steel joists	per cwt.	15	0
Plain compound girders	„	18	0
Do. stanchions	„	20	9
In roofwork	„	26	6

RAIN-WATER GOODS.

		3″	4″	5″	6″
Half-round plain rebated joints	ft. run	1/-	1/1	1/3	1/6
Ogee Do. do.	„	1/2	1/3	1/9	2/3
Rain-water pipes with ears	„	1/3	1/10	—	—
Extra for shoes and bends	each	2/9	3/11	—	—
Do. stopped ends	„	1/1	1/4	1/9	2/6
Do. nozzles for inlets	„	2/2	2/7	3/7	4/-

PLUMBER.

		s.	d
Milled lead and laying in flashings and gutters	per cwt.	35	6
Do. do. flats	„	34	6
Extra labour and solder in coated cesspools	each	6	0
Welt joint	per ft. run	0	4
Soldered seam	„ „	1	6
Copper nailing	„ „	0	3

		½″	¾″	1″	1½″	2″	4″
Drawn lead waste per ft. run		10½	1/2	1/9	2/5	3/-	—
Do. service	„	1/3	1/8	2/2	3/2	—	—
Do. soil	„	—	—	—	—	—	6/-
Bends in lead pipe	each	—	—	—	—	2/3	5/6
Soldered stop ends	„	0/7	0/11	1/3	2/-	2/6	—
Red lead joints	„	0/9	0/10	1/1	1/7	1/10	3/6
Wiped soldered joints	„	2/-	2/6	2/9	3/5	4/3	6/-
Lead traps and cleaning screws	„	—	—	—	10/-	13/-	—
Bib cocks and joints	„	6/-	9/-	13/-	—	—	—
Stop cocks and joints	„	10/6	12/6	17/6	50/-	—	—

PLASTERER.

		s.	d.
Render, float and set in lime and hair	per yard sup.	2	0
Do. Do. Sirapite	„ „	2	3
Do. do. Keen's	„ „	3	0
Add saw lathing	„ „	1	4
Add metal lathing	„ „	2	4
(Not including hangers or runners, etc., for suspended ceilings.)			
Portland cement screed	„ „	1	7
Do. plain face	„ „	3	3
Mouldings in plaster	per 1 girth	0	1½
One-and-a-half granolithic pavings	per yard sup.	4	6

GLAZIER.

		s.	d.
21-oz. sheet plain	per foot sup.	0	6½
26-oz. Do.	„ „	0	7½
Obscured sheet	„ „	0	8
¼-in. rolled plate	„ „	0	9
¼-in. rough rolled or cast plate	„ „	0	10
¼-in. wired cast plate	„ „	1	1

PAINTER.

		s.	d.
Preparing and distempering, 2 coats	per yard sup.	0	7½
Knotting and priming	„ „	0	7
Plain painting, 1 coat	„ „	0	9
Do. 2 coats	„ „	1	2
Do. 3 coats	„ „	1	9
Do. 4 coats	„ „	2	4
Graining	„ „	2	3
Varnishing twice	„ „	1	9
Sizing	„ „	0	3
Flatting	„ „	0	7
Enamel	„ „	1	1
Wax polishing	per foot sup.	0	6
French polishing	„ „	1	2
Preparing for and hanging paper	per piece	2/- to	4/-

*These prices apply to new buildings only. They cover superintendence by fireman and carry a profit of 10% on the prime cost without establishment charges. A percentage of 1½ should be added for Employers' Liability and National Health and Unemployment Act, and from 1s. 6d. per £100 for Fire Insurance. The whole of the information given on this page is copyright.

NEW BUILDINGS IN SCOTLAND

(*Continued from page 667.*)

Stewart and Paterson, architects, 16, Blythswood-drive, Glasgow.

INCHINNAN. — WAREHOUSE.—The India Tyre Co., Ltd., are to erect, from plans by their own architects, on the Greenock-road, a new warehouse and offices.

KILMARNOCK.—PREMISES.—From plans by their own architects, the Kelvin Construction Co., Ltd., Loreburn-road, Fossilpark, Glasgow, and to erect for the Scottish Motor Traction Co., Ltd., a new 'bus station, with workshops and offices, etc. The building is to be constructed in Nursery-avenue, at £7,000.

KIRKWALL.—HOUSING.—The T.C. are proceeding shortly to spend £9,000 on 22 new houses in the Papdale Park site of the town.

LANARKSHIRE.— PAVILION.— Plans prepared for £10,000 pavilion and hall, etc., to be erected at Fossilpark for the Ashfield Football Club. Messrs. Ross and Buchanan, 187, Pitt-street, Glasgow, are the architects, and the excavation, brick and glass work will be by Messrs. John Livingstone and Sons, Ltd., Glasgow.

LEITH.—BUILDING.—Plans have been prepared and approved for the first portion of a scheme, estimated at £250,000, for the British Ropes, Ltd., for which Mr. James S. Johnstone, Charlotte-street, Leith, is the architect.

OBAN.—ADDITIONS.—Plans are now being prepared for reconstruction and additions to the Marine Hotel. Mr. James Taylor, architect, 220, West Regent-street, Glasgow, and Mr. Robert Galbraith, 65, Bath-street, Glasgow, measurer.

SALTCOATS.—HOUSING.—The T.C. has agreed to certain amendments, suggested by the Department of Health, on plans of 164 houses, which are to be erected at the corner of Dalry-road and High-road. Tenders are to be invited.

STIRLING.—REHOUSING.—The T.C. are to proceed with a second rehousing scheme at the Drip-road at a cost of £61,688. Tenders for the erection of 212 houses under the scheme have been accepted by the Council and sanctioned by the Department of Health.

NEW PUBLIC WORKS

BOGNOR.—A scheme for building a large winter garden, at a cost of £38,300, is being considered by Bognor Regis Urban District Council. It will accommodate 2,000 people in semi-circular terraces, with a further 850 in a central building.

BRIGHTON.—Brighton Town Council has rejected a proposal to proceed with the first section of the proposed £450,000 Town Hall. It agreed to spend £165,000 on enlarging the School of Art into a College of Art, and to promoted a Bill in Parliament for a £300,000 sea front improvement scheme. In place of the Town Hall scheme the council decided to ask for plans for a new building to provide police and magistrates' quarters.

DARTFORD.—Plans and specifications are now being prepared for the erection of the first section of the super electricity generating station to be built at Littlebrook Farm, Stone Marshes, for the Kent Electric Power Co., 240, High-street, Rochester. This section will cost £2,750,000, and will include buildings and other accommodation to house the initial 120,000 kilowatts of plant contemplated. The consulting engineers are Messrs. Merz and MacLellan, 32, Victoria-street, S.W.1.

GREAT BRITAIN.—Amongst the contracts advertised by local authorities in this issue as being open to tender are :—Herefordshire—alterations and additions to Ross Public Assistance Institution; Cambridgeshire—male block at County Infirmary, Mill-road, Cambridge; Epsom and Ewell—12 houses and 8 flats in Hook-road, Epsom.

NEWCASTLE-UPON-TYNE.—The special committee of Newcastle City Council, which is dealing with the question of new municipal buildings, has decided to recommend to the Council a site immediately behind St. Thomas's Church, Barras Bridge. It is estimated that the site will cost £181,250.

TENDERS

Communications for insertion under this heading should be addressed to "The Editor," and must reach him not later than Tuesday evening.

* Denotes *accepted.*
† Denotes *provisionally accepted.*
‡ Denotes *recommended for acceptance.*
§ Denotes *accepted subject to modification.*
¶ Denotes *accepted by H.M. Government Departments.*

Aberdeen.—New Catholic school, for the Corporation. Mr. J. Ogg Allan, architect, 25, Union-terrace :—

Excavation—	
*J. McAdam & Sons, Ltd.	£776 12 0
Reinforced concrete—	
*Clark & Chapman	7,876 10 4
Mason and building—	
*A. G. Rennie, Brechin	7,269 15 9
Steel construction—	
*George Bisset & Son	589 0 0
Heating engineering—	
*A. F. Anderson, Ltd.	2,739 0 0
Slater—	
*Alexander Adam & Co.	626 18 0
Asphalt—	
*W. Briggs & Co., Ltd.	516 12 0
Iron railings, gates and smithy—	
*G. Bisset & Son	190 0 0
Plaster work and lathing, etc.—	
*J. Scott & Son (Aberdeen), Ltd.	2,872 0 0
Painting and glazing, etc.—	
*William Smith	1,120 2 6
Joinery, carpentry and ironmongery—	
*A. Rattray	3,670 0 0
Electrical fittings and installation—	
*A. McRobb, Ltd.	786 9 10
Steel windows and casements, etc.—	
*The Crittall Manufacturing Co., Ltd., Glasgow	3,462 18 3

(Remainder of Aberdeen.)

Arbroath.—Works in connection with alterations and extensions to the library, for the T.C. Messrs. Carver, Symon & Ross, architects, 126, High-street :—

Mason—*Chas. Dick & Son, Dick-street, Monifieth.
Joiner—James Robertson & Son.
Plumber—*Wm. L. Crook, Guthrie Port.
Plaster work—*Archd. Donald & Son.
Electrical—*J. E. Crane, Dundee.
Painter—*R. M. Meekison & Sons.
(Remainder of Arbroath.)

Baldock.—Six houses and block of four flats in Norton-road, for the U.D.C. Mr. C. H. Hignett, F.R.I.B.A., architect, Croft-lane, Letchworth :—

Baxter & Worboys, Stotfold, Arlesley	£2,900
Pettengell & Co., Hitchin	2,898
F. J. Scoot, Baldock	2,895
*Beaumont & Taylor, Henlow, Biggleswade	2,515

Ballybay.—Clinic, for the County Board of Health :—

*P. M'Geough, Monaghan	£2,753 17 6

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SECURE CONTRACTS WITH

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Belper.—6 houses in Common-road, Holloway, for the R.D.C. :—

*H. Tomlinson, Belper	£1,762

Birkenshaw.—31 Houses, for the U.D.C. :—

Drainage—*H. Wardman.
Mason—*F. P. Leach & Sons.
Electrical installations—*Inman, Joist & Co.
Slating—*Harry Nelson, Ltd.
Joinery—*Joe Potter.
Plastering and plumbing — *F. P. Leach & Sons.

Birmingham.—Retaining wall and stables at Hockley goods yard, for the G.W.R. Engineer, Paddington Station :—

*E. C. Jordan & Sons, Harrow-road, Newport (Mon.)

Birmingham.—Garage and motor-coach station fronting Hurst-street and Inge-street, for the Red Warrior Coaches, 73, Ashted-row :—

*Sinfield & Co., 77, Alum Rock-road, Birmingham.

Birmingham.—Four-story addition to the premises of Messrs. Docker Bros., Rotton Park-street, Edgbaston, Birmingham. Mr. S. N. Cooke, F.R.I.B.A., architect, Sun-buildings, Bennett's-hill :—

Contractors—*B. Whitehouse & Sons, Ltd., Monument-road, Edgbaston, Birmingham.
Steelwork—*Rubery, Owen & Co., Birmingham.

Birmingham.—Factory in Soho-hill, Handsworth, for the Dennison Watch and Case Co., Ltd., Villa-road, Lozells. Messrs. Peacock & Bewlay, architects, 83, Colmore-row :—

*W. J. Whittall & Son, 132, Lancaster-street, Birmingham.

Birmingham.—Extensions to the premises of Messrs. Canning & Co., Ltd., of Great Hampton-street, Birmingham. Messrs. Peacock & Bewlay, architects, 83, Colmore-row :—

*T. Elvins & Son, Naden Works, Soho-hill, Birmingham.

Birmingham.—School adjoining the Commercial College extension, Great Charles-street :—

*Grosvenor Workman, 200, Broad-street, Birmingham.

Birmingham.—Reconstruction of the "Duke of Edinburgh" public-house at the corner of Hooper-street and Dudley-road, for Messrs. Ansell's Brewery, Lichfield-road, Aston, Birmingham :—

*W. & J. Webb, 257, Great King-street, Birmingham.

Birmingham.—Widening Hadfield-road bridge over the G.W. Railway at Yardley Wood, for the T.C. Mr. H. J. Manzoni, M.I.C.E., City Engineer :—

*Currall, Lewis & Martin, Ltd., Birmingham, 21.

Birmingham.—Extension to premises in Redfern-road, Tyseley, for Messrs. Bakelite, Ltd. :—

*Maddocks & Walford, Tyburn-road, Birmingham.

Birmingham.—Factory in Bromford-lane, for Messrs. Wilcox & Lines, Ltd. :—

*Cross & Cross, Ltd., Walsall.

Birmingham.—Works, for the E.C. :—

Structural alterations in connection with the reorganisation of the Albert-road council school—	
*W. B. & F. T. Archer, Rookery-road	£3,548 0
Timber hutments at Cockshut Hill, Sheldon—	
*Harrison Smith Buildings, Ltd.	2,298 10
Stockrooms and staff lavatories at Cromwell-street council school—	
*Trow & Sons	235 0
Provision of staff lavatories at Birchfield-road council school—	
*W. & J. Webb	119 10
Alterations and improvements at Aston technical school—	
*Trow & Sons	405 0

Bournemouth.—Fibrous plasterwork, for new premises, for Messrs. Lloyds Bank, Ltd. Mr. F. S. Elgar, architect, Salisbury :—

*Allied Guilds, Ltd., Birmingham.

Bournemouth.—Fibrous plasterwork, for new offices at Bowmaker House, Christchurch-road. Messrs. Rowley & Partners, architects :—

*Allied Guilds, Ltd., Birmingham.

Brighouse.—Alterations and additions to Rastrick Common Senior Council Senior School, for the E.C. Messrs. Jackson & Fox, F.R.I.B.A., architects, 1, Harrison-road, Halifax :—

Contractors—	
*J. Horkin & Son, Liversedge	£2,103 1 0
Joinery—	
*W. Halliwell, Ltd.	667 10 0
Plumbing—	
*J. Kilburn	510 4 4
Plastering—	
*J. H. Barraclough	371 0 0
Slating—	
*H. Castle	146 0 0
Heating—	
*Edgar Pitton & Co., Ltd., Manchester	334 16 0

(Remainder of Brighouse.)

Bristol.—Large grain silos at Avonmouth, for Messrs. Henry Hosegood & Son, Ltd., 22, Queen-square, Bristol. Messrs. John Clark & Son, 3, Romford-place, Liverpool, and L. G. Mouchel & Partners, Ltd., 3a, Victoria-street, S.W.1, associated architects :—

*Sir Lindsay Parkinson & Co., Ltd., Lindsay House, Shaftesbury-avenue, W.1.
(Approximately £50,000.)

Bromsgrove.—Factory and stores in Kidderminster-road, for Messrs. B. Sanders & Sons, The Button Works. Mr. G. C. Gadd, A.R.I.B.A., architect, Town Hall-chambers :—

*Y. Lacy & Sons, Bromsgrove.
*David Rowell, Ltd., London, S.W.1.

Calderbank.—40 houses on the Calderbank housing site. Mr. Peter C. Smith, Lanarkshire County Housing Architect, Hamilton :—

Excavation, brick and mason—
*E. Morgan & Co., Hamilton ... £7,609 4 6
Joinery, carpentry and ironmongery—
*McQueen & McBean, Mossend ... 5,306 4 1
Plumber work and sanitary fittings—
*J. Shaw & Sons, Uddingston ... 2,006 11 10½
Slater—
*Archibald Rowatt, Hamilton ... 1,800 0 5
Plaster and lathing—
*A. Park & Sons, Strathaven ... 887 17 11½
Painter—
*J. L. Boag, Hamilton ... 602 3 6
Electrical fittings and installation—
*W. & H. Nelson, Ltd., Bellshill ... 263 2 8

Cardigan.—14 houses near Greenfield-row, for the T.C. Mr. J. P. Williams, Borough Surveyor :—

D. Williams & Sons, Aberystwyth ... £8,506
D. J. Rees & Son, Pantyffwrn, Cardigan ... 7,212
W. J. Lewis, Cardigan ... 5,400
*Bowen & Thomas, Maesleg ... 5,008
B. Owen, Newport, Pem. ... 4,771
(Accepted, subject to M.H. approval.)

Chesterfield.—New "Frecheville" Hotel at the corner of Birley Moor-road and Heathfield-road, Reighton, for Messrs. Mappins Masbro' Old Brewery, Ltd., Greasboro'-road, Rotherham. Messrs. J. E. Knight & Co., architects, Regent House, Moorgate, Rotherham :—

*Thomas Roper & Sons, Ltd., Sheffield, 3.
(Estimated cost: £12,000.)

Cleethorpes.—Six houses, for the U.D.C. :—

*Taylor & Coulbeck ... £2,256 8

Clydebank.—Erection of the new high school on the Kilbowie area site, for the Dumbartonshire County Council. Mr. Joseph Weekes, architect, 18, Park-circus, Glasgow. Messrs. Muirhead & Muir, measurers, 154, West Regent-street, Glasgow :—

Excavation, brick and mason — *A. M. McDougall & Co., Glasgow.
Slater—*S. Holmes, Rutherglen.
Joinery, carpentry and ironmongery—*Dougall & Co., Dumbarton.
Steel construction — *Brownlee & Murray, Ltd., Glasgow.
Reinforced concrete—*A. MacDougall & Co., Ltd., Langside.
Plumber work and sanitary engineering, etc.—*Robert L. Renfrew & Sons, Ltd., Glasgow.
Steel casements and windows, etc.—*MacLean & Co., Glasgow.
Plaster and lathing — *Donald Livingstone & Son, Clydebank.
Glazing—*A. S. Wright & Co., Ltd., Glasgow.
Heating engineering and installation—*Taylor & Fraser, Glasgow.

Coleraine.—Reconstruction of the fever hospital, for the B.G. :—

*W. Currie, Coleraine ... £7,241

Coventry.—170 houses on the Radford Aerodrome site :—

*Building & Public Works Construction Co., Ltd., Swindon ... £69,220

Cudworth.—New Wesleyan Reform Church in Albert-street and Barnsley-Pontefract-road, for the Trustees :—

*J. Stothard, Cudworth, near Barnsley.

Doncaster.—12 houses in Nelson-road, Edlington, with road and sewer works, and six on housing estate at Barnby Dun, for the R.D.C. Mr. J. A. Williams, surveyor, Nether Hall :—

	Houses.	Roads, etc.
Edlington—		
*W. Rusling, Doncaster	£3,839 ...	£273 2 6
Barnby Dun—		
*W. Rusling, Doncaster ...		£1,908

Doncaster.—Billiards hall in Scrooby-road, Harworth, for Mr. Cutts. Mr. A. Blythe Richardson, L.R.I.B.A., architect, 26, Printing Office-street :—

*W Rusling, Dessecar, Doncaster.

Dundee.—Reconstruction and additions at Lochee-road Institution for the Education of the Deaf and Dumb. Mr. James Findlay, architect and measurer, 35, Albert-square, Dundee :—

Excavation, brick and mason—*J. Carnegie & Sons.
Joinery, carpentry and ironmongery—*W. & R. Brownlee.
(Both of Dundee.)

Durham.—Erection of council school at Harden, for the C.C. Mr. F. Willey, architect, 34, Old Elvet, Durham :—

*D. Glen, Bk. Queen's-road, Jarrow-on-Tyne ... £20,959

Durham.—Electrical installations, for the County E.C. :—

Auckland Park council school—
*R. Robson, Willington ... £110
Durham girls' county school—
*R. Robson, Willington ... 599

East Dereham.—Building works in connection with the Central Isolation Hospital, for the Norfolk C.C. :—

‡J. Youngs & Son, Ltd., Norwich ... £27,936

Edinburgh.—Church and other offices, for the Church of Scotland. Mr. James McLauchlan, architect, 6, Melville-crescent. Messrs. R. & A. K. Smith, measurers, 4, Forres-street :—

Excavation, brick and mason—*John Martin & Sons, Ltd.
Joinery, carpentry and ironmongery—*Colin MacAndrew & Partners, Ltd.
Plumber work and sanitary engineering, etc.—*D. Stevens.
Plaster work and lathing, etc.—*W. Stewart.
Slater—*Alexander Ogilvy.
Electrical fittings and installation — *W. A. Smith & Co.
(All of Edinburgh.)

Edinburgh.—Premises at Leith-walk, for Messrs. Montague Burton. Messrs. MacLennan & Cunningham, architects, 57, Melville-street, Edinburgh :—

Excavation, brick and mason—*R. Gilchrist & Sons, Ltd., Glasgow.

Egham.—32 dwellings at West End housing estate, for the U.D.C. :—

*J. Gerrard & Sons, Ltd. ... £11,965

Essex.—Works, for the C.C. :—

Electrical installation at new Sutton's Institution—
*E. Beckwith & Co., Ltd., Barking £4,563 6
Mortuary, etc., at the Braintree Institution—
*E. C. P. Brand, Braintree ... £803

Fen Drayton, Cambs.—Seven pairs of houses, for the Land Settlement Association, Ltd. Mr. Fred C. Levitt, architect, Commerce House, Biggleswade :—

Frank Ayling, Ltd., Norbury ... £6,484 0
Mortloch & Son, Willingham ... 4,993 0
F. Pinn, Elstree ... 4,777 10
*Winton Hayes, Ltd., Potton ... 4,755 0

Fulwood.—For (*a*) shelter near Parklands-drive, Garstang-road, and (*b*) public conveniences at Blackpool Hotel-yard, Broughton, for the U.D.C. :—

(*a*)—*R. Baron, Preston ... £106 10
(*b*)—*R. Topping & Son, Ltd., Preston 294 0

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Gateshead.—Painting at the Council Chamber and the Town Hall, for the C.B. Mr. F. H. Patterson, Borough Engineer :—

*Merrilees & Denton, 95, High West-street, Gateshead.

Gateshead.—Printing works in South Shore-road, for the Northumberland Press, Ltd. Messrs. Marshall & Tweedy, FF.R.I.B.A., architects, Mecyn House, 129, Pilgrim-street, Newcastle :—

*J. R. Rutherford & Sons, Minories, Joinery Works, Jesmond, Newcastle.

Glasgow.—New school for Catholic children at Hamilton Hill, for the E.C. :—

Excavation, mason and brickwork—
‡Wilson Bros. ... £42,248
Carpenter and joiner work—
‡Dick & Bennies ... 10,469
Steelwork—
‡Fleming Bros. ... 5,260
Plumber work—
‡McCulloch & Giffen ... 3,589

Glasgow.—Church and complete offices at Kelvinside, for the United Free Church of Scotland :—

*Stillmac, Ltd., 57, Oswald-street, Glasgow.

Glasgow.—Temporary school at Knightswood, for the E.C. Mr. William McLaig, architect, 129, Bath-street :—

Excavation, brick and joinery and other works—
*R. Anderson & Co., Ltd., Glasgow £489 14 8
Plumber and sanitary fixtures, etc.—
*George Munro, Glasgow ... 536 13 9
Electrical fittings and installation—
*Kennedy, Stark & Co., Glasgow 221 13 5

Glasgow.—Two new housing schemes, one of 46 houses at Dalmarnock-road, and one of 30 houses at Haghill-road, for the Corporation. Mr. William McNab, architect, Housing Director's Office :—

Excavation, brick and mason—
*R. W. Stewart & Co., Glasgow ... £7,814 7 1
4,221 18 7
Joinery, carpentry and ironmongery—
*Samuel M. Stark, Bridgeton, and *Robert Anderson & Co. (Glasgow), Ltd., Glasgow ... 5,699 19 1
3,512 4 4½
Plaster and lathing—
*A. C. Whyte & Co., Ltd., Pollockshaws ... 1,455 18 9
754 9 0
Plumber, sanitary engineering and gas fitting—
*Hugh Twaddle & Sons, Ltd., Bridgeton, and *John Paterson & Co. (Plumbers), Ltd., Glasgow ... 2,728 5 0
1,454 10 10
Slater work and roughcasting, etc.—
*W. Gradon & Co., Glasgow, and *Charles Wilson, Dennistoun ... 939 18 5
503 12 6
Glazier—
*The Caledonian Glass Co., Ltd., and *G. G. Kirk & Co., Ltd., Glasgow ... 125 0 0
65 0 0
Iron railings and gates, etc.—
*Robert Marchbank & Co., Larkhall, and *T. R. Fleming, Glasgow ... 297 17 1½
161 16 2
Electrical fittings and installation—
*W. S. Watson, Ltd., Glasgow ... 273 4 0
139 0 6

Glenmavis.—56 houses on the Kirkstyle housing site, for the Lanarkshire C.C. Mr. Peter C. Smith, Lanarkshire Housing Architect, Hamilton :—

Excavation, brick and mason—
*E. Morgan & Co., Hamilton ... £9,098 9 3
Joinery, carpentry and ironmongery—
*McQueen & McBean, Mossend ... 5,506 12 1
Plumber work and sanitary fittings—
*D. Kirk, Ltd., Coatbridge ... 2,491 3 2
Slater and roughcasting—
*M. Thom & Co., Ltd., Airdrie ... 2,118 2 3
Painter—
*John L. Boag, Hamilton ... 562 11 2
Electrical fittings and installation—
*D. Henderson, Glasgow (Great Western-road) ... 312 15 8
Iron railings and gates, etc.—
*R. Marchbank & Son, Larkhall 507 11 3

Hairmyres.—Heating and hot-water services in connection with the reconstruction and extensions to the sanatorium and colony. Mr. John Stewart, architect, Albert-street, Motherwell :—

*G. N. Haden & Son, Ltd., Glasgow ... £9,927 19 9

Hamilton.—Church suite of halls and complete offices, for the Church of Scotland. Messrs. George Arthur & Son, architects, Graham-street, Airdrie :—

Excavation, brick and mason—*Henry Boots (Garden Cities), Ltd., Hamilton.

Heywood.—56 A2 type houses in two blocks of eight and four blocks of ten; two blocks of six A4 type houses and one block of eight A3 type houses; and 23 bungalows in two blocks of four on one site and in three pairs, one block of four and one block of five on another site, for the Corporation. Mr. A. Middleton, B.Sc., A.M.I.C.E., Borough Surveyor, Town Hall :—

‡A. Tomkins, Ltd., Manchester.

Holmes Chapel.—Works and laundry, for Messrs. Benger's Food, Ltd., Otter Works, Strangeways. Messrs. J. H. Andrews & Butterworth, architects, 9, St. James-square, Manchester :—

Plumber—*R. Crabtree.
Painting—*Jones & Jackson, Ltd.
Plastering—*A. & S. Wallace.
Slating—*F. Brown & Sons.
(All of Manchester.)

Keighley.—Alterations at number of infants' schools to provide nursery-class accommodation, for the T.C. :—

Eastwood—
Masons—
*F. Waterhouse £515 0
Joiners—
*Pearson & Wharton, Ltd. 136 0
Holycroft—
Masons—
*F. Waterhouse 103 0
Ingrow—
Masons—
*T. Moore 250 10
Parkwood—
Masons—
*J. Wharton 260 0
Joiners—
*J. Laycock 102 5

Kendal.—Methodist Mission Hall at Longpool, for the Trustees of the Methodist Circuit. Mr. A. Knewstubb, P.A.S.I., architect and surveyor, St. Andrew's-chambers, Penrith :—

Builders and slaters—*J. Gibson & Son.
Carpenters and joiners—*G. Burton.
Plasterers—*J. Storey & Son.
Plumbers—*T. R. Dixon.
Glaziers and painters—*W. Brown & Son.
Heating—*L. Airey & Co.
Electricians—*R. Hadwin & Son.
(All of Kendal.)

Kilmarnock.—Buildings at 60 to 70, King-street, and 2 to 10, Mill-lane, for Messrs. Boots, Cash Chemists. Mr. Percy J. Bartlett, architect, Station-road, Nottingham. Messrs. Colin, Young & Smith, treasurers, 102, Bath-street, Glasgow :—

Excavation, brick and mason — *Jowes & Liller, Ltd., Back Templeton, Troon.

Kilmarnock.—Premises and warehouse with offices in Titchfield-street. Mr. C. Armour, architect, 95, Morrison-street, Glasgow. Mr. Thomas Stewart, measurer, Clydesdale Bank-buildings, Kilmarnock :—

Excavation, brick and mason—*R. Muir & Sons, Ltd., Kilmarnock.
Slater—*The Scottish Wholesale Co-operative Society, Ltd., Glasgow.
Plaster and lathing—*Elder & Sons, Kilmarnock.
Joinery, carpentry and ironmongery—*R. Scott & Sons, Kilmarnock.
Heating engineering and installation — *S. Gibson, Kilmarnock.
Plumber work and sanitary engineering—*W. Wylie, Kilmarnock.
Electrical fittings and installation—*J. C. Baillie, Kilmarnock.
Tile, terrazzo and cement works—*Elder & Co., Kilmarnock.

Kingstown.—146 houses at Monkstown ,for the Corporation :—

*J. Rooney, Balbriggan £51,106

Lancaster.—Eight almshouses in Queen-street, for the Lancaster Charities. Messrs. Harrison & Moore, architects, 73, Church-street :—

*Thompson & Jackson, Ltd., Lancaster.

Leeds.—Removal and re-erection of various statues from Victoria-square, fronting the town hall, to various sites on Woodhouse Moor, for the Corporation :—

‡J. T. Wright & Son, Ltd. £977

London.—List of new contracts placed by H.M. Air Ministry for the week ended September 26 :—

Tangmere—married officers' quarters, external services, E. J. Logan, Shaftesbury-avenue, W.C.2.
Duxford—erection of married officers' quarters, John Wilmott (Hitchin), Ltd., Hitchin.
Pembroke Dock—extension of existing hangar, (2) provision of new hangar, Rees & Kirby, Ltd., Merveston, Swansea.

¶London.—Tenders accepted by H.M.O.W. for week ended September 24 :—

Rotherham E.E.—erection—M. J. Gleeson, Ltd., Woodseats, Sheffield.
Coed-y-Brenin M. Training Centre—hutments—Fletcher & Son, Delamere-street Works, Crewe.
National Maritime Museum—print storage cases—Libraco, Ltd., Lombard-road, Charlton, S.E.7.
Royal Scottish Museum, Edinburgh—glass for showcases—Pilkington Bros., Ltd., St. Helens.
Racks—Duncan Tucker (Tottenham), Ltd., Lawrence-road, S. Tottenham, N.15.
Telephone operators' chairs—The Tan Sad Chair Co. (1931), Ltd., Avery House, Clerkenwell Green, E.C.1.
Tooting Sorting Office—reconditioning work—F. Troy & Co., Ltd., 194/196, Finchley-road, N.W.3.
Pier showcases, centre and surround, supply delivery and erection—A. Edmonds & Co., Ltd., Constitution Hill, Birmingham.
Castors for movable troughs—Autoset Clamp Co., Ltd., 19/22, Charlotte-street, Birmingham.
Showcases and stands, supply, delivery and erection—J. Taylor & Son, Edin., Ltd., 110, Princes-street, Edinburgh.
Soap powder—E. Cook & Co., Ltd., The Soapery, Bow, E.
Chairs, W.7, Benin or Lagos mahogany—W. Hands & Sons, Ltd., 36, Dashwood-avenue, High Wycombe.
Wall cases, bronze, supply, delivery and erection—A. Edmonds & Co., Ltd., Constitution Hill, Birmingham.
Screens and wall boarding—Wm. T. Nicholls, Ltd., St. Paul's-road, Gloucester.
Nests of drawers—North of England School Furnishing Co., Ltd., Kinross-street, Darlington.
Throgmorton-avenue E.P.O.—alterations to Welfare accommodation—Higgs & Hill, Ltd., 14, Godliman-street, E.C.4.
Thurnbury T.E.—erection—Walter W. Pitcher & Sons, Thornbury.
Northampton E.E.—heating and hot-water services—F. Lack, 33, Edinburgh-road, Queen's Park, Northampton.
St. Helier, Jersey, H.P.O.—heating and hot-water services—G. N. Haden & Sons, Ltd., Orchard-street, Bristol.
Cornwall House—internal painting—Sykes & Son, Ltd., 10, Essex-street, Strand, W.C.2.
Brigg P.O. and T.E.—heating and hot-water services—The Leeds Marble and Heating Works, Ltd., 62, Woodhouse-lane, Leeds.

¶London.—The following works contracts have been placed by the War Office during the week ended September 24 :—

Longmoor—erection of new headquarter offices for the Railway Training Centre—J. B. Edwards & Co. (Whyteleafe), Ltd., London, W.
Bovington and Lulworth—periodical services—Fields, Ltd., Reading.
Blackdown—erection of married soldiers' quarters —J. B. Edwards & Co. (Whyteleafe), Ltd., London, W.
Larkhill—erection of garrison church—J. Drewitt, Bournemouth.

London.—Works, for the Hammersmith B.C. :—

Demolition of 1, 2, and 3, Magazine-cottages (opposite North Pole-road)—
London Demolition Co., Ltd., Isleworth £57
*J. Moore & Son, Ruvigny-gardens, S.W.15 30
Abolition of existing men's conveniepce on south side of King-street, west of Weltje-road, and provision of a shelter type convenience for both sexes—
A. Perton £1,793
G. W. Clarke 1,620
F. Coyle & Co., Ltd., Brentford 1,590
*Wm. Lowe & Son, Ltd., 190, Castelnau, S.W.13 1,563
Alterations to the mess-room and office at Mardale-street depot—
A. Perton £213
Wm. Lowe & Son, Ltd., Barnes 149
G. W. Clarke 135
*F. Coyle & Co., Ltd., 61, High-street, Brentford 112
Provision of mess-room at Scrubs-lane depot—
A. Perton £357
G. W. Clarke 245
Wm. Lowe & Son, Ltd., Barnes 230
*F. Coyle & Co., Ltd., 61, High-street, Brentford 220
New underground sub-station in Loftus-road. Borough Engineer and Surveyor—
A. S. Perton £519 10
W. Lowe & Son, Ltd. 420 0
G. W. Clarke 410 0
*F. Coyle & Co., Ltd. 387 0

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Painting works at public conveniences at Shepherd's Bush and Latimer-road, and at certain urinals—
Wm. Brown & Sons, Ltd. £476 5
G. W. Clarke 424 0
F. Coyle & Co., Ltd., Brentford 399 9
*Wm. Lowe & Son, Ltd., 190, Castelnau, S.W.13 ..... 247 0

London.—Works for the Lambeth B.C. :—

Repairs at 49, Hercules-road—
G. Glover & Sons £256 0
Orchard & Moody 175 15
H. T. Oliver & Sons, Ltd. 146 10
J. Appleby & Sons, Ltd. 141 10
Crabb & Son, Ltd. 139 0
H. D. Harding, Ltd. 137 0
*W. A. King & Sons, Ltd., Melbourne-square, S.W.9 ..... 132 0
External decorations to various housing estates—
Cottington-street and Newburn-street—
Orchard & Moody £958
G. Glover & Sons 693
F. Vernon & Co. 677
A. King & Co. (Brixton), Ltd. 599
H. D. Harding, Ltd. 542
Kay-zed, Ltd. 520
*Crabb & Son, Ltd., 38-40, Upper Tulse-hill, S.W.2 513
St. Louis-road and Redan-terrace—
G. Glover & Sons £674 0
Orchard & Moody 623 10
A. King & Co. (Brixton), Ltd. 561 0
H. D. Harding, Ltd. 534 0
Crabb & Son, Ltd. 496 0
Kay-zed, Ltd. 434 10
*F. Vernon & Co., 185, Loughborough-road, S.W.9 ..... 417 0

Manchester.—Garage and offices in Southgate, for Messrs. Kendal, Milne & Co. (Harrods), Ltd., Deansgate. Messrs. J. W. Beaumont & Sons, FF.R.I.B.A., architects, Dan Lee-buildings, Spring Gardens :—

*R. Carlyle & Co., Ltd., Manchester.

Melrose.—Reservoir work at Lindean and water scheme at The Allenshaw. Messrs. Gilbert Thomson & Son, engineers, 164, Bath-street, Glasgow :—

Scheme 1—
*J. Monteith, Musselburgh.
Scheme 2—
*Messrs. Crawford, Largs.

Moreden.—Six houses at Hall-walk, Coleshill, for the R.D.C. :—

*A. Walker & Son, Coleshill £1,770

Ongar.—17 non-parlour cottages, for the R.D.C. Mr. H. C. Phillips, Surveyor :—

H. L. Bird, Ilford £7,465 0
Summerfield & Carlton, Hatfield Heath 6,449 10
L. T. Herringshaw, Woodham Ferrers 5,340 0
Smith Bros., Epping 5,300 0
*J. W. Seager, Doddinghurst, Brentwood 5,040 0
E. G. Roast, Brentwood 4,941 0
T. Sitch, Ongar ... (one pair only) 612 0

Ormskirk.—Alterations and additions to the Ormskirk council school, for the Lancashire E.C. Mr. Stephen Wilkinson, F.R.I.B.A., County Architect, Preston :—

*J. Sutcliffe & Sons (Builders), Ltd., St. Annes-on-Sea £26,493

Port Glasgow.—Demolition and addition, etc., to the ropeworks factory in Bay-street. Messrs. Burnet & Boston, architects, 190, Hope-street, Glasgow :—

Excavation, brick and mason—*A. Wilson & Son.
Steel construction—*Fleming Brothers.
Joinery, carpentry and ironmongery—*William Fyfe & Son.
Plumber work and sanitary engineering, etc.—*William Anderson (Glasgow), Ltd.
(All of Port Glasgow.)

Portsmouth.—Block of 25 flats in Clarendon-road. Mr. D. E. Harrington, A.R.I.B.A., architect, Cross Keys House, Moorgate, E.C.2 :—

*Gee, Walker & Slater, Ltd., Fitzmaurice-place, Berkeley-square, W.1.

¶Portsmouth.—Plastering and tiling work, for H.M. Civil Engineer-in-Chief's Department, Admiralty :—

*Marchetti, Ltd., 75, Copnor-road, Portsmouth.

Prescot.—Erection of 14 houses and bungalows in Smithy-lane and Mill-street, for the U.D.C. Mr. H. Turner, A.R.I.B.A., surveyor :—

*Martin Joyce, Stockport.
(Cost £5,000.)

Preston.—Erection of Little Hoole and Walmer Bridge junior and infants' school, for the Lancashire E.C. Mr. Stephen Wilkinson, F.R.I.B.A., County Architect, Preston :—

*T. Croft & Sons, Ltd., Preston £7,324

Preston.—Works, for the C.B. :—

Brickwork in connection with fixing of Cornish boiler at pumping station, Marsh End—
*Adam Allan, 16, Tabor-street, Burnley.
Conveniences at Avenham-park—
*D. Whittle & Sons, 83, London-road, Preston.
Demolition of property in Fylde-street area—
*William & James Goodier, Rose-street, Preston.

Ressemann.—New county hospital building, for the County Board of Health :—

*Murphy Bros., Cork £64,935

Ryde (I.O.W.).—New ward of 12 beds, two wards of 2 beds each, kitchen, sink room, sterilising room, bathrooms, sisters' day room, linen stores, etc. at the Royal Isle of Wight County Hospital. Messrs. Hon. John Seely & Paul Paget, FF.R.I.B.A., architects, 41, Cloth-fair, E.C.1 : —

*Brazier & Sons, Ltd., Above Bar, Southampton £5,719

Salford.—Block of offices at the corner of The Crescent and Oldfield-road, for the Transport and General Workers' Union. Mr. R. S. Bowers, F.R.I.B.A., architect, 104, High Holborn, W.C.1 :—

Joiner—*C. W. Norris, Farnworth, near Bolton.
Artificial stone—*Liverpool Artificial Stone Co.
Plastering—*J. Gibbons & Son, Ltd.
Painting—*Jones & Jackson, Ltd.
Tiler—*Harrop & Co.
Asphalter—*R. H. Lord (Asphalters), Ltd.
Mason—*Bolton Stone & Concrete Co., Ltd., Bolton.
Plumber and glazier—*T. Ballantyne & Co.
Slater—*W. Altham, Bolton.
(Remainder of Manchester.)
(Estimated cost, £30,000.)

Saxmundham.—Work at cemetery, for the U.D.C. Mr. John Hooper May, L.R.I.B.A., architect, Saxmundham :—

Hayward & Sons, Saxmundham £401
E. J. Edwards (Exors.), Norwich 386
*Smyth Bros., Saxmundham 382

Scarborough.—28 houses and flats in Ebenezer-place, Globe-street and Tollgate House, for the T.C. Mr. J. Paton Watson, A.R.I.B.A., Borough Surveyor :—

*E. P. Stephenson, Knaresborough ... £9,000

Scarborough.—New Newlands Hotel in Newlands Park-drive, Newby, for Messrs. Moor & Robson's Breweries, Ltd., The Crown Brewery, Francis-street, Hull. Messrs. Wilkinson & Smith, L.R.I.B.A., architects, 6, Queen-street :—

*Ernest Hunter, Scarborough.

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Shetts.—Iron fencing at the Stane Cemetery, for the Lanarkshire C.C. :—

*W. Prentice, Caledonia-road, Larkhale £380 2 4

Shrewsbury.—Making-up six streets, for the T.C. :—

*Greenly Bros., Wolverhampton £5,422 14 1

Shrewsbury.—120 houses at Wingfield, for the T.C. :—

*Edmund Johnson, Ltd., Stoke-on-Trent.

South Shields.—Junior instruction centre, for the E.C. Mr. Howard Hill, architect, 10, Winchester-street :—

*S. Carruthers & Sons, Hugh-terrace, South Shields £7,500

Southsea.—Offices, etc., at 1-2, King's-terrace, and 2-4, King's-road, for Messrs. Bailey & Whites, Ltd., 451, Commercial-road, Portsmouth. Mr. Ernest J. Thomas, F.R.I.B.A., F.S.I., architect, 30, Langport-terrace, Portsmouth :—

*F. J. Privett, Ltd., Cottage-grove, Portsmouth.

Stretford.—Erection of Quadrant Hotel in Great Stone-road, for Messrs. Walker & Homfray, Ltd., Woodside Brewery, Salford. Messrs. George Westcott & Son, F. & A.R.I.B.A., architects, 13, Bridge-street, Manchester :—

*P. Hodkinson, Ltd., Manchester, 13.

Stretford.—Erection of Stretford Technical College in Talbot-road, Old Trafford, for the E.C. Mr. Stephen Wilkinson, F.R.I.B.A., County Architect, County Offices, Preston :—

Masons—*Bolton Stone & Concrete Co., Ltd., Bolton.
Slaters—*W. Altham, Bolton.
Plastering—*W. Pickup, Eccles.
Plumbing—*J. Jaffrey & Co., Manchester.
Painting—*A. Sharracks, Rochdale.
(Estimated cost, £68,638.)

Sunderland.—Conversion of premises on the Esplanade into offices, for the R.D.C. :—

*J. & T. Parker, Commercial-road, Sunderland.

Sutton Coldfield.—Senior departments at Boldmere council schools, for the T.C. Messrs. Nicol & Nicol & Thomas, architects, 58, St. Albans-road, Moseley, Birmingham. Quantity surveyor, Mr. Leonard Voisey, Cathedral-chambers, 10a, Temple-row, Birmingham :—

*G. T. Stephens & Son, Boldmere-road, Wylde Green, Sutton Coldfield £33,999

Walsingham.—Houses, for the R.D.C. :—

Blakeney (six)—
*H. Shrive, Heacham £2,033 0 0
Briston (eight)—
*S. C. Andrews, Reepham 2,640 0 0
Helhoughton (two)—
*H. Shrive 758 0 0
Hempton (ten)—
*H. Shrive 3,366 10 0
Hindringham (four)—
*Fowler & Hawes, Wighton 1,367 4 6
Fulmodestone (four)—
*S. C. Andrews 1,330 0 0

Walton-le-Dale.—New Council offices in Station-road, Bamber Bridge, for the U.D.C. Mr. A. C. M. Lillie, L.R.I.B.A., architect, Brown Edge, Bamber Bridge, near Preston :—

*A. Threlfall, Ltd., Leyland.
(Estimated cost: £16,000.)

Wednesbury.—Temporary school buildings in Walton-road, Crankhall-lane (West) estate, for the T.C. Mr. A. Booth, L.R.I.B.A., M.I.Struct.E., Architect to the E.C :—

*Harrison Smith Buildings, Ltd., Birmingham £1,410

Westcliff-on-Sea.—Forty flats in Seaforth-road. Messrs. Howes & Belcham, architects, 9, Fenchurch-street, E.C. :—

*A. J. Arnold.

Wexford.—9 houses, for the Corporation :—

*B. M'Guire, Wexford £6,000

Winchester.—Two three-bedroom houses at Otterbourne, for the R.D.C. :—

*L. T. Crosswell £642 10

Wolverhampton.—Licensed premises in Green-lane, Aldersley, for Messrs. W. Butler & Co., Ltd., Springfield Brewery. Messrs. Lavender & Twenty-man, F. & A.R.I.B.A., architects, Waterloo-chambers, Waterloo-road :—

*J. McLean (Builders), Ltd., Coven, Wolverhampton.

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